

# THE BULLETIN

JANUARY 23, 1995 ~ 48TH YEAR ~ NUMBER 11

## Job Training Funds to Help Universities

*Projects will be designed to avoid layoffs*

BY SUZANNE SOTO

A PROPOSAL TO GIVE UNIVERSITIES and other public sector institutions access to a \$300 million job training fund is encouraging news, say U of T representatives.

The provincial government plans to make the fund available to municipalities, universities, school boards and hospitals. The money will be used to prevent layoffs or get unemployed workers back in the workforce. Projects must be developed

jointly by management and labour; money will be granted on a first-come, first-served basis and will be available until March 31, 1997.

To receive these funds, the institutions must establish job registries by March 31. The registries will enable employers to match laid-off workers with job vacancies in their particular sector.

At a Jan. 19 meeting at Queen's Park, several university representatives

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## Three Steacies for U of T

THREE RESEARCHERS AT U OF T are winners of the prestigious E.W.R. Steacie Memorial Fellowship this year. The Natural Sciences & Engineering Research Council grants four fellowships a year; U of T is the only institution ever to have three recipients,

a record set in 1983.

The winners are Professors Eduardo Blumwald of the Department of Botany, Kumar Murty of the Department of Mathematics and Ted Shepherd of the Department of Physics as well as Pierre L'Euyer of the Department of Computer Science & Operational Research at the University of Montreal.

Blumwald was rewarded for his outstanding contributions to the field of plant membrane transport, says a news release from NSERC. By looking at the way a plant's genes translate signals of stress, Blumwald has begun to uncover how plants develop resistance to diseases and adapt to harsh environmental conditions such as salinity, drought and cold.

Murty (whose brother Ram at McGill University won the fellowship in 1991) is cited as a brilliant young mathematician. He is making a major contribution to number theory and arithmetic geometry, a central field of modern mathematics, NSERC says. Focusing on prime numbers he explores how number relationships are tied to problems in geometry.

Shepherd's work has opened up a new area of investigation with major implications for the understanding of global climate change, NSERC says. The leader of the Middle Atmosphere Modelling project, an all-Canadian research venture, Shepherd is studying the dynamics of the atmosphere between 10 and 100 kilometres above the earth's surface.

Steacie fellowships are awarded to leading researchers who have completed their doctorates within the last 12 years. Winners receive salaries and benefits for up to two years and are released from teaching and administrative duties so they can concentrate on their research full-time.

## IF THIS IS WINTER, IT MUST BE SPRING



*It's January outside but the damp weather has been dumping more rain than snow on Toronto. Inside, warm temperatures in the Department of Botany's greenhouse encourage plant growth and raise hopes for an early spring.*

ROB ALLEN

## INSIDE



### Willow talk

FORESTERS AGREE THAT WILLOW trees have exciting possibilities. Page 5

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OUR COLUMNIST FELT SOMETHING was missing and he found it. Page 13

## CHEMICAL ENGINEERING

## FUEL FOR THOUGHT

*Its fumes may smell like french fries but it's a whiff of the future*

BY ALFRED HOLDEN

YOU PULL IN TO THE GAS STATION, SLIDE YOUR credit card through the pump's computer and make your choice. What'll it be today — Mazola, Crisco or President's Choice extra-virgin?

In some parts of Europe motorists who drive a diesel-powered vehicle can already buy what is basically modified cooking oil to fuel their cars. This practice may spread, thanks in part to research at U of T where results are being licensed through the Innovations Foundation.

What has been perfected is a faster, better way of making bio-diesel, a fuel that packs the energy of ordinary diesel but comes from common oil crops such as corn, canola, sunflowers and soy beans. "It's non-toxic, biodegradable and relatively clean-burning," says David Boocock, a professor in the Department of Chemical Engineering & Applied Chemistry. He and a research

team have been working on the project with support from the Natural Sciences & Engineering Research Council.

The idea for bio-diesel, he explains, probably originated with farmers who have long been adept at finding ingenious solutions with whatever is at hand. But the fuel hasn't seen widespread use because eventually its gummy texture clogs engines.

In the lab the explanation becomes clear: vegetable-based oils have molecules that are about triple the size of diesel molecules, Boocock says. Breaking them down is possible through a process called transesterification in which the oil is mixed with methanol, an alcohol. The resulting methyl esters are almost a clone for diesel molecules and burn well.

~ See FUEL: Page 3 ~

## IN BRIEF



### Undergraduate teaching receives funds

THE TORONTO CHAPTERS OF THE CANADIAN INSTITUTE OF MINING, Metallurgy & Petroleum will contribute \$100,000 to undergraduate teaching in geological and mineral engineering. The money will help fund two adjunct professorships to be held by Charles Pitcher, president of Greater Lenora Resources Corp., and George Kent, president of Glimmer Resources Inc. "Industry has to get away from the passive granting of scholarships, chairs or capital funds to universities," said Ted Yates, manager of market research at Cominco Ltd., in a news release Jan. 5. "What is now needed is more active participation by industry in improving the curriculum and more contact with students."

### A different World Series in Toronto

THE WORLD SERIES ON CULTURE & TECHNOLOGY HAS STARTED. The graduate course began Jan. 13 when 25 students at the University of Ontario in France and 16 at U of T attended the first of 12 lectures transmitted from France via videoconference technology. Developed by Derrick de Kerckhove, director of the McLuhan Program in Culture & Technology, the course features a number of leading French thinkers. It is open to students in French, philosophy, comparative literature, information studies, fine art, history and philosophy of science and technology, anthropology and other departments with an interdisciplinary approach to contemporary issues. Lectures are given in French, with simultaneous translation available; seminars are conducted in French and English.

### Waugh named lifelong learning president

ALEX WAUGH, VICE-PRINCIPAL AND REGISTRAR OF WOODSWORTH College, has been elected president of the Ontario Council for University Lifelong Learning for a one-year term. The 25-year-old organization is an affiliate of the Council of Ontario Universities; all universities in the province belong to it. Its goals are to promote continuing education and to have such studies recognized as a valuable source of learning for Ontario adults.

### \$100,000 given to Erindale campaign

ERINDALE COLLEGE'S \$6 MILLION STUDENT CENTRE CAMPAIGN HAS surpassed the \$3.75 million mark, thanks to a \$100,000 gift from Hammerson Canada Inc. Bruce Hyland, Hammerson's president and chief executive officer, announced the gift in November. Erindale's three-year capital campaign, which began May 31, hopes to raise \$6 million from corporations, individuals, foundations and the college's alumni and friends. The proposed 30,000 square-foot student centre will house study halls, a student lounge, dining areas and administrative offices for student organizations.

### Genome research centre to be announced

A NUMBER OF DIGNITARIES ARE SCHEDULED TO GATHER TODAY AT Mount Sinai Hospital. According to a media advisory from the hospital and the Ontario Ministry of Municipal Affairs, they will take part in the announcement of "major infrastructure and research investments in Canadian biotechnology and the establishment of Canada's largest centre for human genome research and molecular medicine." The guest list includes Premier Bob Rae, Art Eggleton, federal minister responsible for infrastructure; Toronto mayor Barbara Hall; Metro chair Alan Tonks; Dean Arnold Aberman of the Faculty of Medicine; William Scott of Bristol-Myers Squibb Pharmaceutical Research Institute, and Alan Bernstein, director of the Samuel Lunenfeld Research Institute.

### Vic, Korean university build ties

STUDENT EXCHANGES AND JOINT RESEARCH PROJECTS ARE TWO OF THE initiatives that will be undertaken starting in the fall of 1995 between Hanshin University in Korea and U of T's Victoria University. Roseann Runte, president of Victoria University, signed a formal exchange agreement in November with Chai Yong Choo, Hanshin's president. Vic and Hanshin are similar in size; Victoria's Emmanuel College, with a large Korean student enrolment, already has many connections with Korea.

## AWARDS & HONOURS

### Law society honours Prichard

PRESIDENT ROBERT PRICHARD WILL RECEIVE AN honorary doctorate of law Feb. 16 from the Law Society of Upper Canada. The degree will be conferred upon Prichard during a convocation ceremony at Roy Thomson Hall when new lawyers are called to the Bar of Ontario. Richard Timney, secretary of the society, said the degree recognizes Prichard's contributions as a scholar, dean of the Faculty of Law and president of one of Canada's pre-eminent universities. The law society's authority to grant degrees dates from the days when it was responsible for educating future lawyers at its own

school — the Osgoode Hall Law School, now a faculty of York University.

### Farber receives pathology award

PROFESSOR EMERITUS EMMANUEL FARBER OF THE Department of Pathology has received the 1995 Gold-Headed Cane from the American Society for Investigative Pathology. The award is in recognition of his outstanding contributions to pathology that include meritorious research, teaching and general excellence in the field. Farber will receive the award at the society's annual meeting in Atlanta April 11.

## Funds Help Universities

- Continued from Page 1 -

met with government officials to review the plan and discuss a province-wide university job registry. John Malcolm, a member of the U of T Staff Association and representative of the Confederation of Ontario University Staff Associations, expressed optimism after the meeting. However, for the plan to be successful, employers must be willing to sit down with workers to work out solutions, he said.

"Will this make it possible for people at U of T to avoid losing their jobs? It may. If there is a willingness on the part of the U of T administration to get involved in this, then, yes, this could help," Malcolm said.

Les Babbage, U of T's director of employment and staff development, said he found the proposal very promising. "We want to look at it and see what we can do. It certainly seems to encourage some positive approaches to the changes that we are all going to have to make."

In a Dec. 5 statement to the provincial legislature Finance Minister Floyd Laughren outlined

his plan to use the \$300 million, originally set aside during the 1993 social contract talks. The money is still available because it was intended to help workers who lost their jobs directly as a result of the social contract cuts. However, most public sector employers, including U of T, signed agreements with their workers that stipulated no jobs would be lost due to the social contract. As a result employers and workers have been unable to access the money.

### THIS MAY HELP PEOPLE AT U OF T FROM LOSING THEIR JOBS

The largest initiative, which may provide up to \$250 million will be the Training for Workplace Innovation Program. It will provide funds for projects that encourage re-employment of staff facing layoffs due to

restructuring the workplace. The employees must be enrolled in training programs; depending on their circumstances, the fund could provide income support, supplement unemployment insurance benefits or pay for direct and indirect training costs such as tuition and books.

Another initiative, expected to allocate about \$20 million, will be known as the Demonstration Projects Program. Its aim will be to support workplace innovation by funding 10 to 15 "exemplary joint labour-management restructuring initiatives" that result in better provision of services and cut costs. Money will be allocated for training and adjustment as well as administrative and consulting costs.

"The programs will ensure that any future workplace restructuring is done responsibly, which is what we have been trying to promote all along," said Massimo Comanducci of the government's market and productivity commission in an interview Jan. 20. "We want to look at restructuring that involves innovative approaches; approaches that will really minimize layoffs and avoid them if at all possible."

## OISE Merger Moves Forward

BY ALFRED HOLDEN

THE TRANSITION TEAMS THAT will guide the merger of the Faculty of Education and the Ontario Institute for Studies in Education are almost in place. "We will announce the names by the end of the week," says Vice-Provost Paul Gooch, who is overseeing the integration process.

Gooch said a team of four will develop a plan for administrative integration. A task force of about 10 people will work out the integration of the academic programs. Both will have equal representation from U of T and OISE. If possible a new dean will be appointed in time to become involved in transition planning, Gooch added. A search committee will be appointed after Jan. 23.

The transition teams are expected to set their own agendas but have the right to consult widely, OISE director Arthur Kruger said in an interview. One of their tasks is to take OISE's single administration and blend it with two of the University's — the Faculty of Education on the one hand and the central administration on the other.

"We both have registrar's offices, so we both have senior administrators and so on. Up to now we've been an independent university, and we have all of these sorts of central functions — finance, human resources, library, computing and so on," said Kruger. "The management team will have to answer the question, how do you create an efficient management and administrative structure in the blended institutions?"

One of the duties of the academic transition team is to figure out who goes where. The faculty, at Bloor and Spadina, and OISE at 252 Bloor St. W. are not miles apart. But Kruger questions whether they are close enough that people working or studying in one building could develop collegial relations with colleagues in the other. "I think if they want a blended institution, both of those committees will have to look at things like space and buildings," Kruger said.

UNIVERSITY OF TORONTO

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The Bulletin is printed on recycled paper. Material may be reprinted in whole or in part with appropriate credit to The Bulletin.

Published every two weeks by the Department of Public Affairs, 21 King's College Circle, 2nd floor, University of Toronto, Toronto, M5S 1A1.

EDITORIAL ENQUIRIES: 978-6981 • DISTRIBUTION ENQUIRIES: 978-4933 • ADVERTISING ENQUIRIES: 978-4933 • Display advertising space must be reserved two weeks before publication date. FAX: 978-7430.



# Universities Capable of Monitoring Their Own Behaviour, Says Munroe-Blum

BY SUZANNE SOTO

UNIVERSITIES ARE QUITE capable of probing allegations of misconduct against their own researchers and don't need the aid of an external body, says Professor Heather Munroe-Blum, vice-president (research and international relations).

But an ethics expert with the Medical Research Council says granting councils are accountable for the public funds they distribute. The whole issue of research misconduct must be addressed, says Francis Rolleston, a director with MRC.

Munroe-Blum's comments were made after the publication of a summary of recommendations from a conference on integrity in research held in November in Toronto. The meeting was co-sponsored by the medical, natural sciences and engineering, and social sciences and humanities research councils.

The summary suggests that the granting councils "monitor institutional policies and develop a memorandum of understanding approach" with universities on the issue of research abuses. It also states that a "zero-tolerance environment for misconduct is needed, with full accountability to the people of Canada."

Munroe-Blum, who attended the conference, said in an interview that there is absolutely no need for the councils to start policing universities. While the councils play an

important role in setting the highest standards for research conduct, it is up to each individual institution to ensure those standards are followed. She has written to the heads of all three councils stating U of T's position.

"The vast majority of universities in this country do not require the assistance of external agencies to meet their obligations," she writes. "Action by the universities, rather than direct

involvement by the councils in investigations, is the only really effective way of promoting ethical conduct."

In the interview Munroe-Blum also said that the suggestion of a zero-tolerance misconduct environment "seems to be a negative, disciplinary approach" to dealing with the problem. "What we are striving for at U of T is primarily a very strong emphasis on education and a culture

where people automatically take responsibility to ensure a high degree of accountability for the use of public funds."

Rolleston, who has been in charge of MRC's ethics guidelines for 18 years, said councils could simply delegate authority to the universities but while some will avoid misuse of public funds, others may not due to circumstances beyond their control.

"How are the councils to exert their accountability for the use of public funds unless they know that all universities are acting properly?" he asked.

He also defended the zero-tolerance concept. "It introduces the concept of quantity, it sets a target and says that lack of integrity and ethics is not acceptable. And, if you're not striving for zero-tolerance, then what are you striving for?"

## Director Appointed in Public Affairs Department

U OF T HAS APPOINTED A NEW director in its Department of Public Affairs. Susan Bloch-Neveite, director of the University of Calgary's Office of Public Affairs, will assume her duties March 1.

She will advise President Robert



Susan Bloch-Neveite

Prichard and Jon Dellandrea, vice-president and chief development officer, as well as other senior administrators. She will also be responsible for the University's media and community relations and publications such as the University of Toronto Bulletin and U of T Magazine.

In an interview Bloch-Neveite said she looks forward to helping shape a distinctive public image for Canada's largest university. "There is a substantial amount of value in the public understanding of the ways in which one institution differs from another," she said. "We need to try and articulate better what makes U of T special."

Dellandrea said the hiring of Bloch-Neveite is "a recognition that the University's public affairs activities are of central importance to the advancement of our academic mission. It is critical that we communicate effectively." U of T, he added,

wants to develop "a proactive, strategic plan" dealing with communications, publications and community relations as it relates to the upcoming fundraising campaign.

"Sue is widely recognized as the leading public affairs professional in Canadian higher education and the University of Toronto is extraordinarily fortunate to have attracted her to come to lead our public affairs efforts."

Bloch-Neveite has been at the University of Calgary since 1989. During this time her office won numerous honours including gold awards for fundraising publications, public relations programs and media relations from the US-based Council for Advancement & Support of Education. Distinctions from the Canadian Council for the Advancement of Education include gold medals in audio-visual

communication, public affairs and communications program.

Bloch-Neveite received her BA at Southern Connecticut State University in New Haven, Connecticut. She was features and arts editor at *The Durham Sun* in Durham, North Carolina, from 1974 to 1980, associate director of the South Carolina Film Office in 1980-81 and features editor of Duke University's magazine from 1981 to 1987. She was director of the office of community relations at the University of Windsor from 1987 to 1989.

Bloch-Neveite replaces Tony Carlson who left the University at the end of last March. Her husband Professor Neil Neveite will join the Department of Political Science in the next academic year. They have two children aged four and six.

## FUEL FOR THOUGHT

— Continued from Page 1 —

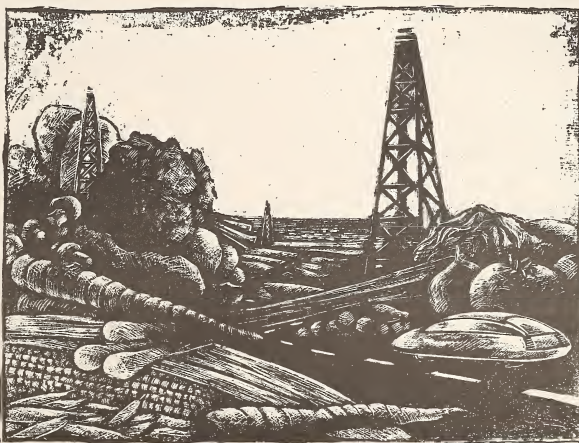
The hitch has been that trans-esterification has involved, quite literally, too much agitation. Like oil and water, vegetable oil and methanol don't mix well. Even by stirring or adding a catalyst that helps the substances combine, the number of steps and added time makes the manufacturing process cumbersome and expensive. The final product costs about 50 percent more than diesel made from crude oil, he says.

However, Boocock and his researchers have found a non-reactive solvent, tetrahydrofuran (THF), which, when added to the oil-methanol mix, completes the reaction in one simple phase and does it 15 to 20 times faster. "We can speed it up so the reaction is complete in 20 minutes," says Boocock, who presented his findings last year in Vienna at the 8th annual conference on biomass for energy, environment, agriculture and industry.

The U of T method, he hopes, will eventually cut costs, "since the speedier process means the material goes through the plant faster."

This could help in overcoming a hurdle that bio-diesel, like other alternative fuels, faces in the marketplace: its high price. And if another oil crisis occurred like the one in the 1970s — where the price of crude became exorbitant — bio-diesel's economics could change overnight.

But Boocock believes its value will be recognized in the future because it is renewable and a generally clean source of energy. For instance



vegetable oil fuel is what chemists call CO<sub>2</sub>-neutral, which means it does not add to carbon dioxide emissions that damage the ozone layer in the earth's upper atmosphere. "When the plants grow they use up carbon dioxide. Then when you burn the fuel you get it back again. The net effect is nil."

Closer to earth, the bio-diesel fumes are cleaner than diesel and smell better — provided

you like french fries. "Close to the exhaust pipe you get a french fry smell," Boocock says. "It's like going by a chip stand." What you nose tells you, instruments confirm: there are no sulphur dioxide emissions and smoke and soot particles are reduced up to 80 percent compared with diesel. One major pollutant, nitrogen monoxide, is higher but can be controlled, he says.

Low levels of emissions is one reason bio-diesel may find wider use. In the US and Europe, governments also have political and economic incentives. Bio-diesel, among other alternative fuels, will reduce dependency on foreign energy sources, says one paper published by the French government. And it would be a boon to France's agricultural sector, helping to stem the gradual abandonment of farmland by creating demand for oil crops. For the same reason, Boocock says, there is also interest in the parts of the US where soy beans are grown.

Just the same, gaining a foothold for bio-diesel has been difficult. Oil companies are tied closely to an infrastructure based on fossil fuels and show interest only in fits and starts, Boocock says. "In recession they back off and in good times they're very interested in what's going on."

Given all the research conducted in Canada, it seems ironic that bio-diesel has been slow to take root here.

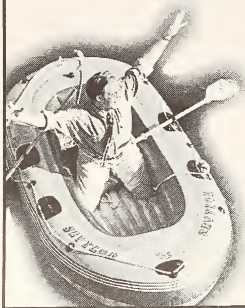
"At this point we haven't found a commercial interest that wants to put money into a project like this," says Jim Johnson, president of the Canadian Renewable Fuels Association, a body that includes farms and other sectors promoting fuel alternatives. "We have a tendency in Canada to sit back and see what the Americans do before we do anything in Canada."

CHRIS VAN ES

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February 19	Global warming should affect the Arctic most. Would it in reality?	Josef Svoboda Prof. Emeritus, Department of Botany, Erindale Campus University of Toronto
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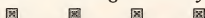
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# University Signs Copyright Agreement

BY ALFRED HOLDEN

NEW RULES GOVERNING photocopying at U of T are expected to be posted and circulated to faculty, students and staff. The University signed a licensing agreement with the Canadian Copyright Licensing Agency (CanCopy) Jan. 13.

For most people the agreement will not mean a big change in copying habits, says Alvan Bregman, assistant vice-provost (arts and science). The licensing agreement ensures individual members of the University can photocopy legally for most administrative or research needs. Other more specific conditions cover multiple copies such as compilations of articles for course material.

Prior to the agreement there were legal questions surrounding the thousands of photocopies made on campuses each day. Much individual copying was believed legal as "fair dealing" under Canadian copyright law but the limits of fair dealing have long been in dispute.

According to the agreement, U of T will pay CanCopy an annual fee of \$1.90 per full-time equivalent student, receiving blanket permission for most individual copying. It will also collect and forward specific fees for other kinds of copying, for instance 3.5 cents per page for copies incorporated into course packages.

Separate fees for copying onto slides, duplicating microfiche and copying materials in braille, audio or large-print will be incorporated into library costs. Bregman acknowledged all this figuring could become an administrative headache. But "record keeping will have to take place," he said. The challenge will be to design a system "that will be as simple as possible."

Bregman was a member of a U of T negotiating team, led by Vice-Provost Dan Lang, that worked out the deal with CanCopy. The agency is an

association of publishers that has been trying to reach agreements to license copying at universities, school boards and other organizations. Through the agreements it plans to collect fees, most of which are expected to be divided among its members.

For a number of reasons U of T will be paying less per student to the agency than other universities. "The University took a very hard line. We weren't going to roll over," Lang said. U of T is among the last universities in Canada to sign due to the length of the negotiating process.

The Association of Universities & Colleges of Canada has argued current copyright law does not give universities enough leeway to photocopy for teaching and research. AUCC has urged Ottawa to amend the law with a clear and liberal definition of fair dealing that specifically includes copying for teaching and research.

Not all publishers are covered under the agreement. Those who are not members include the University of Chicago Press and works by the business schools at the University of Western Ontario and Harvard University. The full list of exceptions will be on circulars and posted in strategic areas near some copying machines. People can still copy these works, Lang said, but under the vaguer rules applying to fair dealing.

Sandra Meadow, custom publishing coordinator for the U of T Bookstore, which prepares photocopied course packages, wonders what effect the new rules will have on general attitudes towards photocopying. "Right now we're among the leaders in being scrupulously observant about this kind of thing but I'll in the street isn't necessarily," she said. "Will this agreement change that? We were speculating as to what this would mean for the community in general. It'll be interesting to see."

## Students to Strike over Proposed Cuts

THOUSANDS OF TORONTO UNIVERSITY, college and high school students are expected to attend a Jan. 25 rally in the city to protest proposed federal government funding cuts to education.

Terri Lasko, liaison officer with U of T's Students' Administrative Council, said that various student organizations on campus have been encouraging members to participate in a 3:30 p.m. demonstration at Ryerson Polytechnic University. The rally, spearheaded by the Canadian Federation of Students, is part of a national Day of Strike & Action against proposals contained in Improving Social Security in Canada, a discussion paper prepared by Human Resources Minister Lloyd Axworthy.

Students have organized a 1 p.m. assembly in Convocation Hall on the day of the rally. Various student leaders will address their concerns about

the Axworthy paper. At 3 p.m. the students will march to Ryerson. Lasko said she hopes that at least 2,000 U of T students will participate.

Meanwhile Deputy Provost Carolyn Tuohy has sent a memorandum to principals, deans, academic directors and chairs, encouraging them to excuse from classes those students who wish to attend the planned events.

"The decisions taken by the Government of Canada in the months ahead are likely to have major implications for our teaching and research activities for many years," the memo says. "It is clearly desirable that there be the fullest possible public debate." She recommends that no academic penalties be imposed on students who do not attend classes, write exams or finish assignments Jan. 25. Instead, she says, alternative dates or arrangements should be made with such students.

## FORESTRY

# WILLOW POWER

Forestry researchers sing the praises of the willow tree

BY KARINA DAHLIN



LONG ASSOCIATED WITH MELANCHOLIC lovers and pensive poets, willows may soon be receiving an image makeover as a valuable source of fuel and a means of fighting pollution.

"In Canada, little attention has been paid to the tremendous potential of willows as a supplier of wood fibre and energy," says Professor Emeritus Louis Zsuffa of the Faculty of Forestry. "But a willow energy plantation would offer a source of biomass 10 times greater than, say, a planted pine forest of equal size and 100 times greater than a natural forest consisting of a mixture of trees."

"Willow plantations could also reduce the amount of carbon dioxide in the air and harmful waste products in our lakes and rivers."

Zsuffa is involved in two willow projects. The goal of one, the Canadian Willow Breeding Program, is to develop willow species for fuel energy plantations and timber use. Zsuffa and his colleagues — Professor Andrew Kenney, research associates Robert Gambles and Dolly Lin and research technician Brenda Vanstone — are busy pinpointing genes that reveal specific traits in willows, something that will help breeders manage their willow plantations and maintain genetic variability. Their research is described in a 1993 issue of the US publication *Journal of Sustainable Forestry*.

The other project is run under the auspices of the International Energy Agency Bioenergy Agreement and coordinated by Zsuffa. Its purpose is to develop efficient, environmentally sound ways of producing firewood for farmers, factories and others with woodburning facilities. Participants come from such countries as Austria, Canada, Denmark, Finland, France, Sweden, the United Kingdom and the US.

Willows are taken seriously in Sweden where more than

11,000 hectares of surplus agricultural land is used for willow plantations. While such plantations exist only on an experimental scale in Canada, millions of hectares of extra agricultural land throughout the nation — several hundred thousand in southern Ontario alone — could be converted, says Zsuffa. "Willows can grow where and when there is difficulty establishing other crops, for example, on temporarily flooded land and in frosty weather. A lot of land that isn't fertile enough for other crops is good for willows."

It is the rapid growth rate of the willow that makes it more effective than other trees as a source of energy. "Most trees take three decades or longer to grow to maturity. Willows normally take two to five years. So they produce wood much more quickly than natural forests do," says Zsuffa.

Willow plantations also make good sense in view of growing environmental concerns about fossil fuels. Because the trees grow so fast, they use more carbon dioxide and produce more oxygen than other species. Zsuffa believes willow forests can improve air quality and reduce a trend to global warming.

In addition, willows make use of water that is unsuitable for other crops. The heavy metals — lead and cadmium, for example — that are found in sludge and waste water are absorbed by willows, and the trees keep these pollutants locked up in their tissue and out of the soil for long periods. "They act as a kind of water purification system," Zsuffa says.

Burning these trees does not have to be an environmental problem. In Europe, smokestacks are fitted with scrubbers that remove the metals before the smoke is released. Meanwhile ongoing trials will show how the heavy metals are absorbed by the trees and where in the trees they are stored.

## U of T Police Regain Special Status

THE METROPOLITAN TORONTO Police Services Board has agreed to allow U of T Police officers to be designated as "peace officers."

The designation — actually special constable and provincial offences officer — will mean that all 34 campus officers will have the powers of arrest, search and seizure. They will also be able to issue summonses for offences such as trespassing and intoxication in a public place.

Currently only 16 officers have the special status, for which they must be sworn in.

Until 1990 all campus officers could become peace officers. Then the police board changed the Police Services Act and stopped granting such status to private citizens working in law enforcement. The U of T administration has been working with the board to regain the special designation for a number of years. In

mid-December the two finally reached an agreement.

Lee McKergow, manager of police services, said he expects to have the officers sworn in over the next few months. Some may require additional training to meet Metro Police standards before being granted special status. He is meeting with Metro's director of police training Jan. 26 to discuss additional requirements.

## IN MEMORIAM

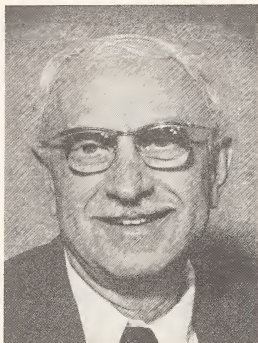
### Vosko's Work Is Recognized by Scientists Around the World

PROFESSOR EMERITUS Seymour Vosko of the Department of Physics died Dec. 21 at the age of 65.

A native of Montreal, Vosko obtained his first degree in engineering physics at McGill University in 1951, a master's degree in physics at McGill in 1952 and a doctorate at the Carnegie Institute of Technology in 1957. Vosko was a professor of physics at McMaster University from 1960 to 1964 and a research scientist at the Westinghouse Research Laboratories in Pittsburgh from 1964 until his arrival at U of T in 1970. In the course of his career here, he taught at Erindale and Scarborough Colleges as well as on the St. George campus. Recently he was named a fellow of the Royal Society of Canada.

Vosko made a series of major contributions to the theory of metals, atoms and, most recently, ions, beginning with pioneering research

in 1959. His work was characterized by a combination of fundamental theoretical studies and advanced computational methods.



Using these methods he made important breakthroughs in the understanding of such diverse problems as the spin susceptibilities of metals and the stability of negative ions. Physicists and quantum

chemists around the world make use of his results and methods which are described in contemporary textbooks.

"Sy Vosko was a valued member of the Toronto condensed matter theory group," said Professor Michael Walker of physics. "He was a good friend, warm and interested in others and a colleague whose integrity in his scholarship and in his dealings with his co-workers, as well as his concern for the progress and welfare of his students, were appreciated by all. His two great passions were science and his family, and his devotion to both was evident."

He is survived by his wife Phyllis and his daughters Judith and Leah. The family has set up a scholarship fund to support a female

graduate student in physics. Donations can be sent to the Seymour H. Vosko Scholarship Fund, c/o B. Macutay, Alumni and Development, 21 King's College Circle, Toronto, Ontario, M5S 1A1.

## Hurtling



Collin Lewis, an arts and science student at Victoria College, displays strength and agility as he practises the hurdles at the Athletic Centre. Lewis won the 60-metre hurdles at the York Invitational, York University, Jan. 14 and placed third in the 50-metre dash at the Hamilton Spectator Games Jan. 13. The next meet at U of T is Feb. 4 at the Athletic Centre.

ANDRE SCHROEDER



### University of Toronto Code of Student Conduct Amendments Relating to Harassment

On December 14, 1994, the Governing Council amended the Code of Student Conduct to include the following types of conduct as offences:

- B. (1)(e) No person shall engage in a course of vexatious conduct that is directed at one or more specific individuals, and that is based on the race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, age, marital status, family status, handicap, receipt of public assistance or record of offences of that individual or those individuals, and that is known to be unwelcome, and that exceeds the bounds of freedom of expression or academic freedom as these are understood in University policies and accepted practices, including but not restricted to, those explicitly adopted.

Note: Terms in this section are to be understood as they are defined or used in the *Ontario Human Rights Code*.

- B. (1)(f) (i) No person shall, by engaging in the conduct described in subsection (ii) below, whether on the premises of the University or away from the premises of the University, cause another person or persons to fear for their safety or the safety of another person known to them while on the premises of the University of Toronto or in the course of activities sponsored by the University of Toronto or by any of its divisions, or cause another person or persons to be impeded in exercising the freedom to participate reasonably in the programs of the University and in activities in or on the University's premises, knowing that their conduct will cause such fear, or recklessly as to whether their conduct causes such fear.
- (ii) The conduct mentioned in subsection (i) consists of
- repeatedly following from place to place the other person or anyone known to them;
  - repeatedly and persistently communicating with, either directly or indirectly, the other person or anyone known to them;
  - besetting or repeatedly watching the dwelling-house, or place where the other person, or anyone known to them, resides, works, carries on business or happens to be; or
  - engaging in threatening conduct directed at the other person or any member of the family, friends or colleagues of the other person.

Copies of the revised Code of Student Conduct may be obtained from the Office of Student Affairs, Room 107 Simcoe Hall.

Office of the Vice-President and Provost.



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## Q & A

# THE MASSEY COLLEGE MARRIAGE COUNSELLOR

*John Fraser, former editor of Saturday Night, becomes master of Massey College July 1 and hopes to build bridges between journalists and academics*

BY KARINA DAHLIN

**BULLETIN:** What brings you to Massey College?

**FRASER:** I first came when Robertson Davies was master in the mid-1970s. He has always been a supporter of mine, offering me both positive and constructive criticism throughout my journalistic career. I was a guest at a grand Massey High Table and I never got over it, I felt so honoured. Then in 1990 Ann Saddlemyer asked me to become an associate fellow and I started getting more actively involved in the life of Massey College. Last November, when I decided to step down after seven years as editor of *Saturday Night*, I rented an office here and before long I ended up with four titles: associate fellow, senior resident, chair of the fundraising campaign and, until July 1, master-elect.

**BULLETIN:** What does a master do?

**FRASER:** I will administer, present the public face of Massey College and, perhaps most important, function almost as *locum in parentis* to the junior fellows. I will also pay close attention to the college's mandate of building bridges between the academic and non-academic worlds.

By definition it's a part-time job, but I think it may be the fullest part-time job at the University. Officially the master works full-time during the academic year when the junior fellows are in residence but, although Massey is affiliated with the University, it is self-governing and financially autonomous so there is business to be done during the summer.

The college is first and foremost a residential community for young graduate students who are carefully picked from the three streams in the University: humanities, sciences and the professions. It works on the wonderful philosophy that learning is not restricted to books, seminars and papers but to an egalitarian exchange of information. Crucial to that philosophy is the close association with senior fellows, the top scholars, some of whom have offices here, who take part in the life of the college and come regularly for meals.

I will live in the master's lodge with my wife and our three daughters, 14, 12 and eight. The residence was built, I guess, with some eye to the founding master, Robertson Davies, who also had three daughters. I suppose you could say it's a house for a master with three daughters and a long-suffering spouse.

My wife, Elizabeth MacCallum, is much more a product of this University than I am. Her grandfather, Dr. James MacCallum, was the first professor of ophthalmology at U of T. Her uncle, Dr. Frederick MacCallum, was a graduate of this university and a pre-eminent virologist. Her cousin was Professor Tuzo Wilson, the geophysicist and a senior fellow here, and she along with her second cousin Susan Wilson was one of the young ladies from Trinity who was dragged into coming to Massey as "presentable young women" when it was an all-male college. She used to say they

always got stuck with catatonic mathematicians. **BULLETIN:** What will you do to build bridges with the outside community?

**FRASER:** We do this already through the high table evenings and the Massey and Gordon lectures but there also needs to be less grandiose ways of doing it. I've got some ideas to make the college more approachable for the larger community but it's probably premature to talk about them now.

**BULLETIN:** How does the rest of the University regard Massey College?

**FRASER:** I haven't been here long enough to say fully. The college probably still carries a certain reputation for elitism. I don't resent that; in my

crease of tuition fees will bring much soul searching as people ask what exactly is a university education for? It's not clear yet how things will work out when everything becomes pricier.

**BULLETIN:** Are you opposed to the anticipated increase in tuition fees?

**FRASER:** I guess I want to sit on the fence on that question for a while. I am all for students being responsible for their own education; that probably comes from the fact that I had to pay my own way through university [Memorial University of Newfoundland and University of East Anglia, UK]. I was helped by subsidies, no question, but I had to bear my

maybe other parts of the University can't and at the same time keep certain practical realities to the forefront while aspiring to some rather grand heights in the educational process.

**BULLETIN:** Do journalists appreciate universities as much as they should?

**FRASER:** That's a complicated question. There is among journalists a longing to be appreciated by leading figures in the university world and a longing among academics for access to the public media. This can foster contradictions and misunderstandings. Some academics say "the outside world doesn't understand us" and blame the media while some journalists say

"academics hold us in contempt." It's a love-hate relationship and I think there's a role for a marriage counsellor.

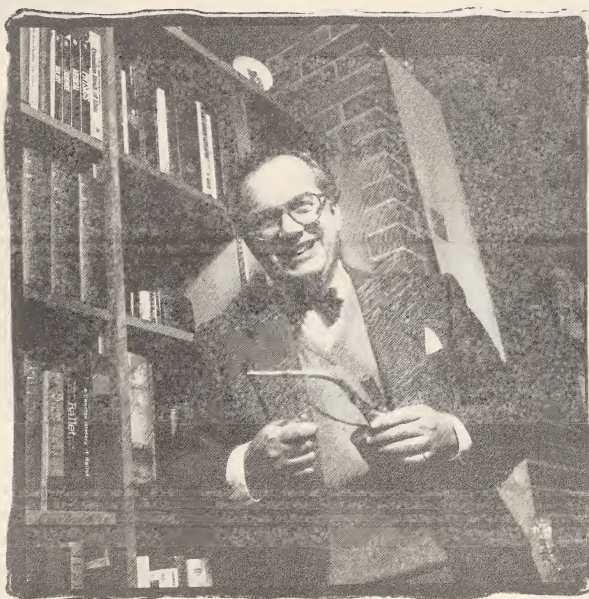
I would like the two sides to recognize that one is not a lesser endeavour than the other, that they have different functions, that it is important for the media to disseminate the ideas from academia and that it is important for academics to make that information accessible. But they both need a better forum to exchange information.

**BULLETIN:** Can journalists do better?

**FRASER:** Journalists can do a lot of things better. The dysfunction in journalism has a lot to do with a prevailing sense of alienation from society's institutions. The cult of the journalist as a loner is detrimental to everyone — to the institutions that are always observed from the outside because journalists often seem wary of making a personal commitment to go the extra stretch, but also to the journalists themselves because, at the very least, the alienation reduces their sense of inquiry and wonder. Some extraordinary things go on at a university, good and bad. This is a place where things are often discovered or developed that actually are part of the wonder of the world. If the academic is always defensive to the journalist, and the journalist always suspicious of the academic, well, that's a pretty sad state of affairs. Unfortunately it is often the case.

Changing this doesn't mean journalists can't be inquisitive but often academics are very good investigative journalists, too, you know. They have investigative skills that journalists could learn a lot from. On the other hand journalists might help some academics understand the wider implications of their research, particularly in the realm of its impact on the public.

A really effective bridge between journalism and academia is right here at Massey College with the Southam fellowships where working journalists can get a break in their careers and come and study courses in a university, getting refreshed, renewed. I would like to build on that a bit, bridge the gap between the media and academia because what's being done inside universities is very important to the city, the country and the world.



*John Fraser, master-elect of Massey College, holds one of his favourite pieces of bric-a-brac — a Chinese water pipe.*

view elitism isn't a terrible thing, it's only terrible if it's based on stupid criteria. As long as no one is kept out of Massey who wants to get in here and is worthy of getting in, then this place has nothing to fear from charges of elitism.

The reputation for social elitism is probably connected to the college's first years as an all-male college. It also carries on some traditions — the gowns and the high table — which may offend some outsiders. If you get involved in the place, however, you can see they are traditions that in fact are generous and incorporating to people.

**BULLETIN:** How does the outside world view the University?

**FRASER:** From all sorts of perspectives. On the positive side a university education is the hope and aspiration of all parents for their children. I think we are in for a lot of scrutiny of the role of universities. The possible in-

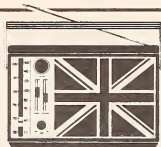
creasing expenses myself. Yet I worry about an increase because I don't want this college to be left on the sidelines when costs do go up. The college does not have a deficit, it is run remarkably well, but things are tight.

**BULLETIN:** Is it your role to enhance the reputation of the University?

**FRASER:** No, I see my job as one of preserving the traditions and ideals of Massey, to govern it well in cooperation with the other officers and fellows of the college. That in itself will speak well of the university it is affiliated to.

We are accountable to our own definition of ourselves, to our junior fellows, to the ideals of the founders and the realities of our times. One of the things I like about Massey is that it is self-governing and has to pay its own way. To me that gives it a very special spot in the life of the city and the country. It is independent, it is free to do some things that

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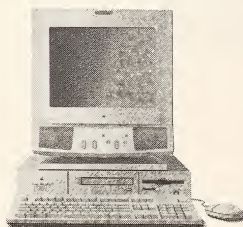
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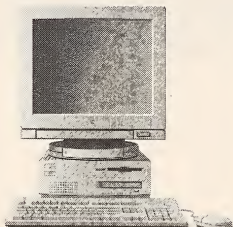
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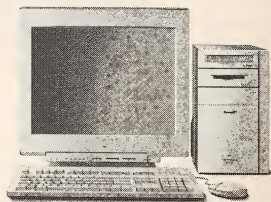
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## BITS & PIECES

A regular sampling of what's been said and seen on campus

EDITED BY KARINA DAHLIN 978-8023

# ACADEMICS ON THEIR KNEES, STUDENTS IN THE AIR

## THE RIGOURS OF ACADEMIC FREEDOM

Academic freedom in colleges and universities, was the topic of a seminar Nov. 23, offered by the Toronto area higher education series. One of the speakers was Michel Horn, a professor of history at York University's Glendon College.

Concern about the utterances or writings of professors, as about their lectures, has waned during the last 30 years. Controversies of the kind associated with Philippe Rushton at Western Ontario and Martin Yaqzan at New Brunswick have become relatively uncommon. Does this mean that academic freedom is now firmly established? Or have professors become less outspoken, and this in spite of the protection afforded by today's form of tenure? Or are politicians, the media and the public less likely to take notice of us when we do speak? Does an apparently greater degree of tolerance simply mean that we matter less?

I am not sure that Canadian universities today are more tolerant of aberrant opinion than they were a decade or two ago. There is a movement within the universities to encourage or even compel professors in their teaching, research and public utterances to avoid giving offence to various groups or individuals, a movement pejoratively referred to as political correctness (social correctness seems more suitable). This movement is reflected to some extent in the statement "Academic Freedom Is the Inclusive University" by the Status of Women Committee of the Canadian Association of University Teachers and to a greater extent in some of the critical comments on that document, a couple of which cast academic freedom as an impediment to the achievement of more desirable objectives. However, I don't regard such manifestations as the central threat to academic freedom today.

More troubling is the attitude expressed in the so-called "zero tolerance" document emanating from the Ontario Ministry of Education last year. When governments become keenly interested in the details of university life, academic freedom is always at risk. Either ignorant or dismissive of academic traditions (or both), the document embodies attitudes that may or may not produce universities significantly more inclusive but will produce a professoriate that is significantly more cowed....

The greatest danger to academic freedom, in my view, comes not from the champions of PC but from worshippers of the bottom line and

those who seek ever more scholar for the dollar. It is not the drive for greater effectiveness that I fear but the effort to achieve greater flexibility. Tenure has come to be seen as a major rigidity, to be curtailed and even eliminated. This puts academic freedom at risk....

To withhold tenure from a group of instructors has the effect of making it more difficult for them to exercise their academic freedom. This is particularly true of the freedom to challenge the prerogatives of the administration. And that, of course, may well be one of the objectives. As a dean of law at the University of Manitoba, Roland Penner, said: "Ostensibly designed to keep academics on their toes, the curtailment of tenure also tends to keep them on their knees. The latter position does not facilitate the assertion of academic freedom."

## CHEERS AFTER CAIRO

Science for Peace sponsored a panel discussion Nov. 15 on the topic after the Cairo Conference on Population & Development: The Agenda for Canada. Professor Rebecca Cook of the Faculty of Law was a panel member.

Protection of women's reproductive health has not been a priority for governments, as reflected by the laws they have created. Historically the principal duty of women has been viewed as bearing children, particularly sons, and as serving as the foundation of families. The cost to women's health of discharging this duty went unrecognized. Poor health, influenced by early and excessive childbearing, and premature death due to pregnancy and close birth spacing were explained as destiny and divine will. Maternal mortality and morbidity were, therefore, not considered amenable to control through health services, education and law.

Governments have now committed themselves through the Program of Action of the Cairo International Conference on Population & Development to reduce pregnancy-related death, now averaging a half a million women annually, by one-half of this level by 2000 and a further one-half by 2015. This is a major shift in thinking from a top-down population control approach of controlling births to a bottom-up approach of empowering women by addressing a wide range of their reproductive health needs, ranging from contraception, prevention and treatment of infertility, sexually transmitted diseases and unsafe abortion to provision of basic obstetric care.

## BACK TO BASICS

A forum on primary education was held at OISE Oct. 24. One of the speakers was Clare Madett Konik, an instructor at the Institute of Child Study.

There are many different approaches to learning. From my own experiences as a classroom teacher and as a student of education, I endorse what has become widely known as "child-centred" learning — that is, learning that focuses on children's active participation and the need for a curriculum that is relevant to their lives. In these fundamental ways child-centred learning is distinguished from more teacher-directed approaches which emphasize rote learning and formal lessons.

Yet in this difficult political, social and economic climate, the public wants concrete, measurable educational results and as they turn their wary eyes to schools, they note that primary classrooms do not look and sound like "real" classrooms. They look longingly to the "good old days" and advocate a return to the "golden age" of primary education.

## EVEN MORE SUPER SUPERCONDUCTORS

Good News from an Abandoned Gold Mine: A New Family of Quaternary Intermetallic Superconductors was the title of a chemistry colloquium Oct. 7 featuring Professor Robert Cava of the AT&T Bell Laboratories in New Jersey.

If there is one general message for materials science that can be abstracted from the success of copper oxide superconductors, it is that working with more complex chemical systems gives nature and materials designers more opportunity to balance opposing forces within a single chemical compound, leading to a better optimization of physical properties. For many desired physical properties, materials with optimal chemical complexity have no doubt not yet been found. Such appears to be the case for intermetallic superconductors, whose study has languished in recent years and which almost never show temperatures above 15K.

We have recently found superconductivity at temperatures up to 23K in quaternary boride intermetallic alloys. The new superconductors display a wide range of thought-provoking chemical and physical properties, suggesting that the final chapter in the intermetallic superconductor story has not yet been written.

## SOMETHING FOR THE SHELVES OF THE LARDER

The downtown campus has a large squirrel population — maybe that is why a reader submitted the following recipe from The Centennial Food Guide by Pierre and Janet Berton.

### Pot Pie Squirrel

Skin and clean 4 squirrels and cut in pieces. Flour and brown in good dripping. Add 1 qt. boiling water, 1 large onion, minced, 1/2 lemon, sliced, salt and pepper. (Fry the onion before adding.)

Cover all closely and stew for 1 hour. Make a delicate biscuit crust, drop in rounds on the squirrels, cover closely and boil 15 minutes. Place the squirrels in the centre of a platter, surround with dumplings, thicken the gravy and pour all over.

## AMERICAN YO-YO INTRIGUES STUDENTS

The research office of the Division of Development & University Relations has prepared a list of memorable events in the history of U of T as recorded in such publications as *Torontonensis*, *The Varsity* and *The U of T Monthly*. The list includes the following:

1920: Paper shortage.

World is suspicious of high-brows.

1925: Simcoe Hall forms the dignified headquarters of the University administration, allowing the main building to become University College.

Tuition fees in arts at UC will be \$75 next session, instead of \$40 which was the cost for many years.



1930: An American student brings a yo-yo to the University of Toronto — students are intrigued.

Legislative library in the parliament buildings closed to students because of overuse.

1934: UC women find it difficult to meet men students on campus. Date Bureau opens. Attitudes of students to war subject to questionnaire: students are inclined towards pacifism.

1940: Social events marked by simplicity and inexpensiveness — boisterous pranks seemed to have discontinued.

1949: University flying club gives lessons to any student who so desires and the government gives \$100 to anyone who can solo in the club.

Women's fall fashion has skipped back to fashion for autumn 1920 with short hairdos, soft kiss curls and rising hemline — 15" from floor, big billowing great coats and masculine suits.

1959: U of T opens the first electronic music studio in Canada, the second in North America.

1960: York University opens with classes at Falconer Hall on U of T campus.

Faculty Club moves into comfortable new quarters at 41 Willcocks St.

1969: Law scholars propose action to stop massacres in Vietnam.

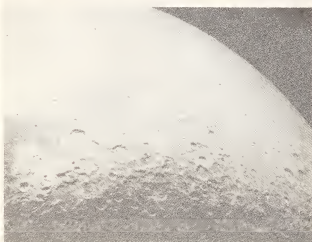
1970: Controversy over the amount of traffic that will go through the Harbor and Spadina intersection because of the



# FARTHER THAN T

*A writer views the world and planets be*

BY SUZA



**T**HE BURLY, SUNTANNED GUARD SPOTS OUR tiny white car tearing along the Chilean desert road in a haze of grit and dirt long before we reach him.

Still, he waits for us to come to a full, and rather ungraceful, stop before approaching. He smiles but his gaze is wary. "Who are you and what business brings you to Las Campanas?" he asks in Spanish.

It is about three in the afternoon and we have arrived at the gate to Las Campanas, a Chilean mountain and the site of the University of Toronto Southern Observatory. The sun is shining brightly but hardy winds and a temperature of about 24 degrees Celsius are keeping the dry heat bearable. My husband Peter and I — in Chile on holidays — left the pretty, coastal city of La Serena in search of the observatory about two-and-a-half hours earlier. It feels much longer.

The 140-kilometre stretch of paved, two-lane highway running alongside the mountain to the observatory's main gate was difficult to travel. Sharp twists and turns, and being stuck behind several large trucks inching their way uphill, slowed us down. We still have another 40 kilometres of narrow gravel road before we reach our destination.

I get out of the car's passenger seat and introduce myself. "I'm a visitor from Canada," I explain. "I'm here to see Boyd Duffee at the U of T observatory. He is expecting me."

The guard asks to see our passports and goes inside a nearby office to telephone Duffee, the observatory's current resident observer. After receiving confirmation he lets us through the gate



Top left: Resident observer Boyd Duffee stands by the telescope's new autoguider, installed last year.

Bottom left: An image of the moon seen through the telescope. Above: Visiting astronomer Terence Dickinson stands by the Helen Sawyer Hogg telescope during a 1993 visit to the University of Toronto Southern Observatory.

and waves us on. "Drive carefully," he advises. "There is a Copec Oil tanker coming down the road so watch out for it."

It is miles before we encounter the pebble-spewing truck and what seems like another hour before we reach the observatory. Perched on rolling hills about 7,000 feet above sea level on the southern fringes of the Atacama Desert, the complex at Las Campanas consists primarily of three large astronomical domes. They spring up tall and white from the rocky, parched terrain. The two largest structures and a nearby lodge are owned by the Carnegie Institution of Washington, a private, not-for-profit organization devoted to scientific research, particularly in astronomy. The rock-and-wood lodge comprises a hotel-style dormitory, a dining hall and a television lounge.

U of T's Department of Astronomy owns the third dome and

a two-bedroom bungalow called Casa Canadiense (Canadian House) on land leased from the Carnegie. The entire compound is enveloped by a cluster of majestic mountains that disappear into the blue horizon. In the late 1960s and early 70s, U of T and a number of American and European institutions chose to build observatories in the area, mainly because of its ideal sky watching conditions. One of the driest places in the world, the Atacama receives a heavy rainfall only two to four times a century, offering clear and bright skies more than 300 nights a year.

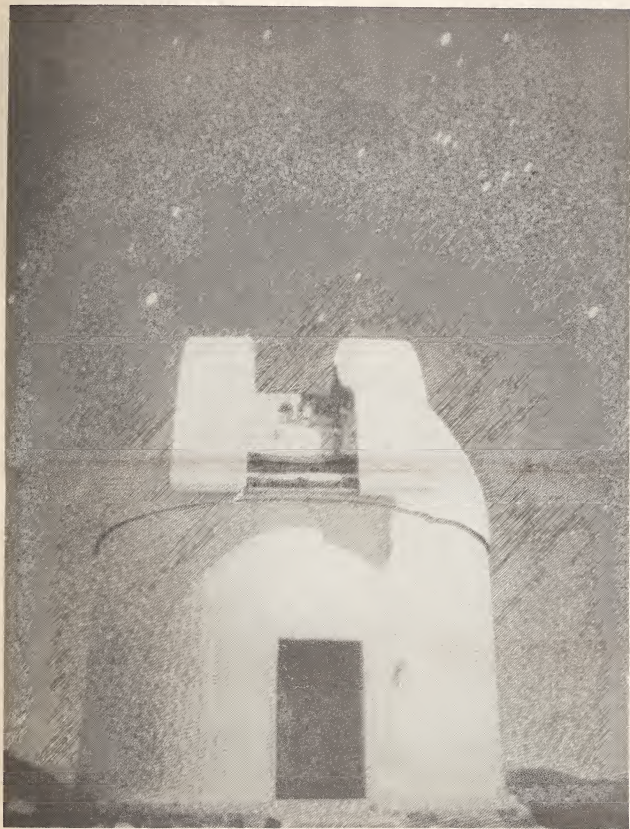
As we drive slowly along the main road, past the lodge and towards the domes, a lone woman jogging on the shoulder acknowledges us with a raised hand and keeps going. Later we learn that she is an astronomer working on a Carnegie fellowship at the duPont telescope, Las Campanas' largest, with an aperture of 2.5 metres. Carnegie's second telescope, the Swope, has a one-metre opening, while U of T's Helen Sawyer Hogg telescope has an aperture of 60 centimetres.

We spot Casa Canadiense. Inside Duffee greets us with a firm handshake and a friendly smile. A 1994 astrophysics graduate of Queen's University, the soft-spoken, contemplative Duffee has been at Las Campanas since June. As resident observer on a two-year contract, his main task is to keep the U of T



# THE EYE CAN SEE

*eyond from a different perspective in Chile*  
**NE SOTO**



telescope and its assorted computers, image-recording equipment and viewing devices operating. He also conducts "service observing" — watching the skies and recording the images for astronomers all over the world who cannot travel to Chile themselves. The requests for such work are approved by the University.

In addition he helps visiting Canadian and other astronomers with their projects. Eventually, he says, over a cup of mint tea, he wants to conduct some of his own research. Fortunately the job does allow him the opportunity to go on occasional "fishing trips," to search the skies for interesting objects. Former U of T resident observer Ian Shelton's discovery of a supernova star in 1987 proved that there is still much out there to be learned about our own Milky Way Galaxy and its satellites, he adds.

Our initial interview over, Duffee, Peter and I agree to go "fishing" later that night. It is now just after 6 p.m. Duffee has arranged our stay at Carnegie's dormitory so we retreat there for a couple of hours of much-needed rest.

Duffee heads to the dining hall. After dinner he will open the dome, turn the computers on and check the wind and humidity conditions. Normally he begins observing at around 10 p.m. and works until 6 the next morning, with a midnight

*Above: A view of the observatory dome, open to the night skies. Top right: Bulletin writer Suzanne Soto at Las Campanas in the Atacama Desert.*

*Bottom right: An Andean condor, photographed by Professor Robert Garrison of the Department of Astronomy, lands near the observatory site.*

"lunch" break. His shift over, he sleeps until about 1 p.m., rising just in time for lunch at the dining hall. He follows this routine for 20 days and then takes a 10-day break. On his time off he usually leaves Las Campanas and visits friends in La Serena or travels around Chile; a Chilean observer assumes his duties.

The sun is in its final setting stage when we set off to keep our appointment with Duffee at 8:30 p.m. The horizon has taken on a dusky orange colour and the temperature has dropped significantly, requiring heavier jackets. As we walk along the paved road towards Casa Canadiense, the only noises breaking the extraordinary silence around us are made by the wind as it rustles dry bushes and runs through the road's metal guard rail, emitting an odd, muffled, pipe-like sound. Duffee tells us the other noises he hears are those made by the telescopes as they



shift positions at night and the occasional fox or two trotting behind him on the gravel sideroads, hoping for food.

No foxes follow us this time. Inside, the telescope, attached to a huge, automated arm, dwarfs an average-sized man. The astronomy department, Duffee informs us, has recently upgraded some equipment at the observatory. It has added an autoguider that, as its name suggests, automatically guides the telescope to record specific images in the sky. In the past astronomers had to guide the telescope manually. The telescope also has a new, camera-like electronic device that can record images of very faint stars. The images are first displayed on a computer screen where astronomers can observe and measure them before storing them on optical disks. "Previously," he explains, "we needed photographic film and a darkroom to photograph and keep a record of these images. Now we use computers and electronics."

Duffee proceeds to find several sights for us. Never having peered through a telescopic lens before, I am awe-struck by the sight of Saturn and its rings. A view of the moon — the cracks on its surface and the jagged edges of its craters — leaves me speechless. He also shows us clusters of stars, chunks of the Milky Way and a view of the Large Magellanic Cloud.

Sometime after midnight, Peter and I head back to the dormitory, leaving Duffee behind to complete his shift. As we walk, neither of us says much, immersed as we are in our own thoughts of the night's events. A gentle breeze whistles by, the now dark-brown mountains stretch endlessly in all directions and the moon, in all its surreal white radiance, illuminates our path.

PHOTOS BY TERENCE DEANSON, ROBERT GARRISON AND PETER SOTO

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## Psst!

### SPSS Licence Holders!

Your SPSS software will stop working January 31 if you don't renew. Call the Software Distribution Office at 978-4990 if you did not receive a renewal notice or if you would like to obtain a new copy.

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## UNIVERSITY OF TORONTO

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January - May 1995

- |             |   |
|-------------|---|
| January 31  | Dick Karp, University of California at Berkeley<br><i>An Introduction to Physical Mapping of DNA Molecules</i>  |
| February 7  | W. Morven Gentleman, National Research Council, Ottawa<br><i>Practice and Research in Software Engineering</i>  |
| February 21 | Maria Klawe, University of British Columbia<br><i>Electronic Games and Interactive Multi-Media: A Power Up for Math and Science in Education?</i>                               |
| March 14    | William Woods, Sun Microsystems Laboratories<br><i>Beyond Ignorance-Based Systems</i>   |
| March 21    | Marc Brown, DEC Systems Research Centre<br><i>Algorithm Audiovisualization</i>  |
| April 4     | David Harel, Weizmann Institute of Science<br><i>On Drawing Graphs Nicely</i>   |
| April 25    | Andrew Clement, Faculty of Information Studies<br><i>Privacy Considerations in the Development of Multi-Media: The Social Responsibilities of Designers, Users and Managers</i> |
| May 2       | David Gries, Cornell University<br><i>Changing How Logic Is Taught and Used</i>   |

This lecture series is sponsored by the Department of Computer Science of the University of Toronto and by the Information Technology Research Centre of the Province of Ontario. All lectures take place on Tuesdays from 11 a.m. to noon in Sandford Fleming 1105, 10 King's College Road. Refreshments will be served in the area outside SF1105 from noon to 12:30 p.m.



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## LETTERS



### ANIMAL RIGHTS GROUP CALLS FOR OPEN DOORS

Robert Harrison writes in his article, *Of Mice and Medicine* (Forum, Dec. 12), "While the vocal proponents of animal rights are fighting for a 'cause,' most biomedical researchers are busy working and don't want to be involved in such distractions." That's exactly the problem! There is a complete denial and refusal to deal with the issues animal rights advocates raise. For example, requests for such basic information as the number and sources of non-human primates used at U of T are not answered. We would like this information not only because we are concerned about the primates as individuals but also because the capture of primates in the wild has ecological implications.

He writes: "Animal rights supporters often try to play on the sentiments of a generally uninformed lay public." It is the animal protectionists who are

trying to get the University to release information to the public (for example, by allowing the news media into labs) so that the public will be informed, while it is the animal research community that, by and large, is trying to keep the public in the dark.

He writes: "The heart-rendering images that animal rights activists repeatedly use to portray cruelty to animals in research laboratories illustrate a very few isolated cases, in most instances dating back decades and in some cases fabricated." We would dearly like to have more up-to-date pictures of what is being done to animals at U of T. We hope that, as chair of the University Animal Care Committee, Professor Harrison will help us get access to the labs so that the pictures and the stories of the animals being used here will be known.

SUSAN KRAJNC  
U OF T ANIMAL RIGHTS ADVOCATES

### FOR THE RECORD

Holly Baines' comments regarding the closure of academic programs in the Jan. 9 article on the OISE-U of T merger are inaccurate (OISE Deal Signed). No program has been closed at OISE since 1981. There have been some mergers of departments and new admissions have been curtailed to a few specializations due to lack of adequate faculty resources but all Ontario Council of Graduate Studies approved graduate programs have been maintained, even those with low enrolments.

MALCOLM LEVIN  
ONTARIO INSTITUTE FOR  
STUDIES IN EDUCATION

### LETTERS DEADLINES

JANUARY 27 FOR FEBRUARY 6  
FEBRUARY 10 FOR FEBRUARY 20

Letters must be written exclusively for *The Bulletin*. Please include a telephone number and, if possible, a fax number.

## BOOKS



*The following are books by U of T staff. Where there is multiple authorship or editorship, staff are indicated with an asterisk.*

### January

**Music Matters: A New Philosophy of Music Education**, by David J. Elliott (Oxford University Press; 400 pages; \$35 US). What is music? Does music deserve a secure place in general education? If so, why? And what should be taught? And how? This text builds new answers to these questions in a wide-ranging examination of music. It examines philosophical, psychological and sociological research and argues that music making and listening are unique forms of cognition and sources of the most important kinds of knowing that humans can achieve. One of the many working ideas is the concept of "curriculum-as-practicum" that explains how music educators can develop students' musicianship and musical creativity.

### December

**Essays in the History of Canadian Law, Volume 5: Crime and Criminal Justice**, edited by Jim Phillips\*, Tina Loo and Susan Lewthwaite (University of Toronto Press; 600 pages; \$45). In examining crime and criminal law specifically, the volume contributes to the long-standing concern of Canadian historians with law, order and authority. It covers criminal justice history at various times in BC, Ontario, Quebec and the Maritimes.

**Cool: The Signs and Meanings of Adolescence**, by Marcel Danesi (University of Toronto Press; 144 pages; \$40 cloth, \$14.95 paper). Cool is a familiar term and it defines a teenage culture marked by its own language and behaviour in which peer manipulation is supported by a consumption-oriented media. This book studies the culture, its symbols, myths and problems from both an academic point of view and a parental need to understand.

**New World Order: Corruption in Canada**, edited by Robert O'Discol\* and Elizabeth Elliott (Saigon Press; 648 pages; \$29.95). This volume completes a trilogy that began with *The New World Order and the Throne of the antiChrist* and was followed by *The New World Order in North America: Mechanism in Place for a Police State*.

### Catching up

**The Painted Furniture of French Canada, 1700-1840**, by John A. Fleming (Canadian Museum of Civilization/Camden House; 180 pages; \$35). Based on archival records, contemporary newspapers, directories and an examination of

pieces in public and private collections, this book is a major reference work for collectors and historians. Viewing these objects as manifestations of demographic and social realities, it analyzes the organization of domestic interiors, the materials and methods of construction as well as high style and folk influences on furniture design and decoration in New France and then Lower Canada to about 1840.

**The Dictionary of 20th Century British Book Illustrators**, by Alan Horne (Antique Collectors' Club; 459 pages, 157 colour and 344 b&w illustrations; \$79.50 US). Most of the great British artists of the 20th century have at some time contributed illustrations for books. This book contains information about well over 1,000 British illustrators, the lesser known as well as the masters. Following introductory articles on such topics as the revival of wood engraving, children's books illustrators, commercial art and book jackets and covers, entries on individual artists provide biographical details, lists of the books each illustrated and galleries and museums where original work has been collected and housed.

### Moscow, Kiev and Minsk:

Identity, Antisemitism, Emigration, by Robert J. Brym (Macmillan and New York University Press; 142 pages; \$30 US cloth, \$20 US paper). This book is based on the first in situ survey of Jews in the Slavic republics of the former Soviet Union, conducted in 1993. It focuses on the patterns of ethnic identity, perceptions of anti-Semitism and emigration plans of Jews in the region.

**Nicolas Guillén's New Love Poems**, translated and edited by Keith Ellis (University of Toronto Press; 176 pages; \$45). This volume of love poems written in 1966 by Cuba's national poet Nicolás Guillén was unknown until he died in 1989 when the woman to whom they were dedicated turned them over to Keith Ellis. The result is a powerful contribution to Guillén's love poetry and to love poetry as a genre in world literature.

**The Death of Old Man Rice: A True Story of Criminal Justice in America**, by Martin L. Friedland (University of Toronto Press; 445 pages; \$37.50). When William Marsh Rice, founder of Rice University, was found dead in 1900, suspicion immediately fell on a young lawyer, Albert Patrick, who was arrested and tried for first-degree murder. This book recounts the trial and the events leading up to it, the various appeals and the eventual outcome. It sheds new light, and casts doubt, on a seemingly ironclad case.

## ON THE OTHER HAND

BY NICHOLAS PASHLEY

### TAKE A NUMBER, PLEASE

THOSE OF US WHO LABOUR IN THE Deep South of this campus (College St.) have been watching with interest the growth of a new building between the bookstore and the School of Architecture & Landscape Architecture.

Visitors to the U of T Bookstore frequently ask about this new structure. The reply, "Oh, it's the new math building" startles many people who haven't thought about the new math for years. I hadn't either. Did the new math become the standard math or did it go the way of ABBA's wardrobe and other abominations of the 70s? And does it need its own building?

The new math building, of course, is really called the Fields Institute for Research in Mathematical Sciences, which is why we call it the new math building. It is named not — as some have suggested — for Dorothy Fields, the lyricist of such great songs as *The Way You Look Tonight*, but for W.C. Fields, the bilious misanthrope who is a role model for mathematicians everywhere.

Why are mathematicians so grumpy? Think about it. Physicists these days are superstars. John Polanyi has made chemistry very sexy (unless he really is working on those killer plagues). Astronomers stay up late hoping to make the next new find, knowing that the discovery of a half-decent nebula could mean that they'll never have to pay for a drink in this town again.

But mathematicians toil in obscurity. Sure, occasionally the papers report on page E36 that a computer somewhere has added a few more tiresome digits to the value of pi. Big deal. Most of us haven't thought about pi since high school.

What mathematicians need is something new, something the rest of us can get behind. When the most recent mathematician most of us can name is Pythagoras, there's something wrong. Let's face it: they haven't discovered a new number since zero, which in itself was a surprisingly long time coming. Indeed the absence of zero in early math is thought to have delayed the



development of soccer for some centuries. The notion that you couldn't start keeping score until both teams had scored at least once led to some very long games.

I have it on good authority that this university's math department has made a breakthrough. Expect an official announcement soon. Have you ever felt something of a gap between the numbers eight and nine? I know I have. Well

it turns out there has been a number lurking there all along. It's not a very big number, to be sure, actually invisible to the naked eye but graduate student A.J. "Integer" Smithers found it late one night at the math lab and it has been named for its discoverer. One, two, three, four, five, six, seven, eight, smithers, nine, 10...

Not everybody's happy about smithers. The math establishment has built careers around the belief that it takes 10 numbers to make 10. Now suddenly they need 11. And, given all new numbers like 30-smithers and smitherty-four, there will now be an extra 20 digits in a hundred, or smitherteen, if you think about it. Are you following me? For example, 1999 will become smitherteen smitherty-smithers. (And, needless to say, fractions of smithers will be known as smitherections.)

Corporations are not happy. The company that makes those paper rolls that fit into Pitase Take a Number dispensers at the butchers will need to retool. The brewers are irate. There will now be only 22 bottles in a case of 24. And who's going to go into a beer store and ask for a two-two?

Still it's an ill wind, as they say. Given that we're all going to need new calculators, somebody's bound to make a bundle. And it has to reap big benefits for the University of Toronto. It'll be like insulin all over again. Sure there will be the carpers. They all laughed at Banting and Best; they all laugh at Smithers. Many of us are still laughing at W.C. Fields.

# EVENTS



## LECTURES

**Nature as Token of God's Sovereignty and Grace in the Qur'an.**

**MONDAY, JANUARY 23**  
Prof. William Graham, Harvard University. 123 St. George St. 3 p.m. *Study of Religion*

**The Wisest of Women Has Rebuilt the House of Israel: The Lives of Conversa Women after 1492.**

**TUESDAY, JANUARY 24**  
Prof. Libby Garbowitz, Department of Near Eastern Studies; Catherine Gilbert Memorial Lecture in Christian-Jewish Relations. Toronto School of Theology, 47 Queen's Park Cres. E. 7:30 p.m. *TST*

**Augusta Emerita (Merida, Spain): From Roman Colony to Provincial Capital.**

**WEDNESDAY, JANUARY 25**  
Prof. Jonathan Edmondson, York University. Lecture room, McLaughlin Planetarium. 5:15 p.m. *Archaeological Institute of America, Toronto Society*

**Racism: Reality and Challenge.**

**WEDNESDAY, JANUARY 25**  
Carol Tator, author, and Mary Jo Luddy, Regis College. Theology and the City: Experience and Theological Reflection series. Elliott MacGuigan Hall, 67 St. Nicholas St. 7:15 to 9:15 p.m. Tickets \$8, couples \$12, students, seniors and uninsured \$6. *Regis*

**Delivering on Promises: Skill and Complexity in Human Interactions with Technology.**

**THURSDAY, JANUARY 26**  
Prof. Bill Buxton, Department of Computer Science, 54B Wemore Hall, New College. 8:30 p.m. *CCF*

**Beyond Textuality: Recent Explorations in the Cultural Formation of the Senses.**

**FRIDAY, JANUARY 27**  
Prof. David Howe, Concordia University. 123 St. George St. 2 p.m. *Study of Religion*

**From Argos to the Wolf of Gubbio.**

**FRIDAY, JANUARY 27**  
Prof. Karl P. Morrison, Raritan University; 1995 Bertie Wilkinson memorial lecture. 400 Alumni Hall, St. Michael's College. 4:10 p.m. *Medieval Studies*

**Electromagnetic Interference: A Long-Ignored Effect.**

**WEDNESDAY, FEBRUARY 1**  
Prof. Emile van Deventer, Department of Electrical & Computer Engineering. 1105 Sandford Fleming Building. 4 p.m. *Electrical & Computer Engineering*

**Dulcinea Doesn't Live Here Any More: Women in the Theatre of Cervantes.**

**WEDNESDAY, FEBRUARY 1**  
Prof. Ellen M. Anderson, York University. 323 Victoria College. 6:30 to 8 p.m. *Society for Mediterranean Studies*

**The City: Fortress or Community?**

**WEDNESDAY, FEBRUARY 1**  
David Boothby, Metro Toronto Police, and John Duggan, SJ, Regis College. Theology and the City: Experience and Theological Reflection series. Elliott MacGuigan Hall, 67 St. Nicholas St. 7:15 to 9:15 p.m. *Regis*

**Toronto's Representative Poetry on the WorldWideWeb: Design Issues and Programming Tools.**

**THURSDAY, FEBRUARY 2**  
Prof. Ian Lancashire, Department of English. 54B Wetmore Hall, New College. 8:30 p.m. *CCF*

**"Secret" Mark: The Director's Cut? Mark's Spirited Remake, in Literary Perspective.**

**FRIDAY, FEBRUARY 3**  
Scott Brown, Centre for the Study of Religion. 123 St. George St. 1 p.m. *Study of Religion*

**Dialogue and Discretion: Sackville and the Anjou Marriage Proposal of 1571.**

**FRIDAY, FEBRUARY 3**  
Prof. Rivkah Zim, University of London. Senior Common Room, Burwash Hall, Victoria College. 4 p.m. *CRS and English*

**Glycols in Organic Synthesis.**

**MONDAY, FEBRUARY 6**  
Prof. Samuel J. Danishefsky, Sloan-Kettering Institute, NY; Peter Yates/FMC lecture. 159 Lash Miller Chemical Laboratories. 4:10 p.m. *Chemistry*

**Palladio's Villa Rotonda.**

**MONDAY, FEBRUARY 6**  
Prof. Martin Kubeš, Technical University of Vienna and Technical University of Prague. 179 University College. 4:30 p.m. *Fine Art, Architecture and York University*

**The Politics of Social Services: Feminism and Battered Women's Shelters.**

**MONDAY, FEBRUARY 6**  
Domenica DiLotto and Debbie Douglas, women's shelter workers; Popular Feminism lecture and discussion series. Boardroom, 12th floor, Ontario Institute for Studies in Education. 8 p.m. *Women's Studies in Education, OISE*

**Why Study Canada?**

**TUESDAY, FEBRUARY 7**  
John Fraser, master-designate, Massey College. 161 University College. 3 p.m. *UC*

## COLLOQUIA

**Children's Understanding and Experience of Kindergarten: Relations to Teachers, Approaches and Language of Instruction.**

**WEDNESDAY, JANUARY 25**  
Jan Pelletier, Institute of Child Study. Room 127, 45 Palmer Rd. 3:30 to 5 p.m. *Child Study*

**The Earth Core-Mantle Boundary.**

**THURSDAY, JANUARY 26**  
Prof. Louise M. Kellogg, University of California at Davis. 102 McLennan Physical Laboratories. 4:10 p.m. *Physics*

**Reconstructing Yourself with Biomaterials.**

**FRIDAY, JANUARY 27**  
Prof. Dennis C. Smith, Faculty of Dentistry. 158 Lash Miller Chemical Laboratories. 3:30 p.m. *Chemistry*

**French Intelligence and the Origins of World War Two.**

**TUESDAY, JANUARY 31**  
Peter Jackson, Carleton University. George Ignatieff Theatre. 15 Devonshire Place. 3 p.m. *International Relations*

**An Enantioselective Synthesis of Dynemicin A and Analogs of Wide Structural Variability.**

**FRIDAY, FEBRUARY 3**

Prof. Andrew G. Myers, California Institute of Technology. 158 Lash Miller Chemical Laboratories. 3:30 p.m. *Chemistry*



## SEMINARS

**Single Ion Spectroscopy at the Limits of Absolute Measurement.**

**TUESDAY, JANUARY 24**  
Alan Mabej, National Research Council. 134 McLennan Physical Laboratories. 4 p.m. *OLLRC*

**Numerical Investigations of the Motion of Isoclastic Liquids in Extensional and Mixed Flows.**

**WEDNESDAY, JANUARY 25**  
Prof. Gary Leal, University of California at Santa Barbara. 219 Wallberg Building. 12:30 p.m. *Chemical Engineering & Applied Chemistry*

**On the Process of Discharge Decision Making for Elderly Patients: A Critical Ethnology.**

**WEDNESDAY, JANUARY 25**  
Donna Wells, Faculty of Nursing. Room 305, 455 Spadina Ave. 4 p.m. *Studies of Aging*

**Transgenic Expression of a Calcium Binding Protein (B-S100) in Astrocytes Disrupts Long-Term Potentiation and Depression in Spatial Learning and Memory.**

**WEDNESDAY, JANUARY 25**  
Dr. Roy Rodger, Mount Sinai Hospital. 4227 Medical Sciences Building. 4 p.m. *Physiology*

**The German Elections of 1994: Trends in Post-Unity Politics.**

**WEDNESDAY, JANUARY 25**  
Prof. William Chandler, McMaster University. Canada & Changing Europe series. Conference Room, 170 Bloor St. W. 4:30 to 6 p.m. *International Studies*

**Birthing Alternatives: Using the Services of a Midwife in Ontario.**

**THURSDAY, JANUARY 26**  
Panel includes Betty Donnerman, Lebel Midwifery Care Organization of Ontario. Map Room, Hart House. 12 noon to 2 p.m. *Office of the Family Care Adviser*

**Economic Reform from Above: The Economic Transition of East Germany, 1990-1994.**

**THURSDAY, JANUARY 26**  
Prof. Jörg Roessler, visiting Centre for International Studies. Combination Room, Trinity College. 4:30 p.m. *International Studies*

**Rethinking Public Administration: Managing Change in a Time of Fiscal Restraint.**

**FRIDAY, JANUARY 27**  
Elaine Todres, Ontario Ministry of Culture, Tourism & Recreation; Rethinking the Political series. 3050 Sidney Smith Hall. 2 to 4 p.m. *Political Science*

**Regulation of fushi tarazu Protein Activity during Drosophila Embryogenesis.**

**TUESDAY, JANUARY 31**  
Andrzej Nasiadka, Department of Molecular & Medical Genetics. 3153 Medical Sciences Building. 2 p.m. *Molecular & Medical Genetics*

**Optical Machines That Learn on Their Own.**

**TUESDAY, JANUARY 31**  
Prof. Dana Anderson, University of Colorado. 134 McLennan Physical Laboratories. 4 p.m. *OLLRC*

**Exhaust Emission Control.**

**WEDNESDAY, FEBRUARY 1**  
K.C. Taylor, General Motors Research, Warren. 219 Wallberg Building. 12:30 p.m. *Chemical Engineering & Applied Chemistry*

**A World Lost Forever: Eastern Galicia in 19th-Century Photographs.**

**THURSDAY, FEBRUARY 2**  
Stella Hrynuk, University of Manitoba. Boardroom, Multicultural History Society of Ontario, 43 Queen's Park Cres. E. 4 to 6 p.m. *Ukrainian Studies*

**Human Rights for Gay and Lesbian Families.**

**FRIDAY, FEBRUARY 3**  
A panel discussion. 12 noon to 2 p.m. *Office of the Family Care Adviser*

**Mixing Social Science with Natural Science: Recent Evidence on the Ecological Sources of Civil Violence.**

**FRIDAY, FEBRUARY 3**  
Prof. Tad Honder-Dixon, Department of Political Science. Rethinking the Political series. 3050 Sidney Smith Hall. 2 to 4 p.m. *Political Science*



## MEETINGS & CONFERENCES

**Implications for Industrial Relations: Social Security Reform and Working Time and Distribution of Work.**

**FRIDAY, JANUARY 27**  
One-day conference. Keynote address. 9:15 a.m.

**Social Security Reform: Implications for Industrial Relations and Human Resource Management.** Panel discussion: Arthur Donner, Advisory Group on Working Time and the Distribution of Work; Andrew Jackson, Canadian Labour Congress; Akiva Starkman, Bureau of Labour Information; Robert Robb, Brock University. 1 to 2:45 p.m. *Working Time and Distribution of Work: Applied Innovations, representatives of the Canadian Auto-workers and Chrysler. 3 to 4 p.m.*  
Closing remarks. 4 p.m. Council Chambers, Simcoe Hall. Registration fee: \$50. Information: 978-1492. *Industrial Relations and Association of Students in Industrial Relations*

**Bohemians at the Crossroads: Václav Havel, Milan Kundera and Josef Skvorecky.**

**SATURDAY, JANUARY 28**  
Speakers scheduled: Josef Skvorecky, Marketa Grotz-Stankiewicz, Lubomir Dolzcel, Miroslav Prochazka, Peter Steiner, Sema Aleksi, Tamara Trojnowska, Veronika Smolova and Paul Wilson. Combination Room, Trinity College. 9:30 a.m. to 6 p.m. *Information*

978-4895. *Slavic Languages & Literature, CREES, Arts & Science, Comparative Literature and Czechoslovak Association*

**Ethnicity & Nationalism.**  
**TUESDAY, JANUARY 31 TO SATURDAY, FEBRUARY 4**  
University College Symposium 17. All events in 179 University College unless stated otherwise.

**TUESDAY, JANUARY 31**  
Ethnicity, Canada and Canadian Literature in English. 10:10 a.m. *Expanding the Ethnics*. 11:10 a.m. *Fugitives and Immigrants: American Blacks in Canada West Before the Civil War*. 12:10 p.m. *Beyond Rescue: Recoveries and Reassessments of Ethnic Identity in the Writings and Work of Basil Johnson*. 1:10 p.m. *Some Reflections on First Nations Nationalism in Quebec*. 2:10 p.m. *Immigrant Experiences: Examples from Canadian Fiction*. 3:10 p.m. *Masala*, film. 7 p.m.

**WEDNESDAY, FEBRUARY 1**  
David Howe and Andrew Fletcher on *Expanding the Ethnics* in a British Union. 10:10 a.m. *Listian Nationalism and Communism in Central and Eastern Europe*. 12:10 p.m. *Intellectuals and the Unification of Germany*. 1:10 p.m. *Germanism since 1990: The Kids on the Street*. 2:10 p.m. *Nationalism: A Musical Celebration*, live performance. 2:40 University College. 3:10 p.m.

**THURSDAY, FEBRUARY 2**  
India: The Nation and Its Fragments. 10:10 a.m. *Ethnicity, Ideology and the Objects of Everyday Life*. 11:10 a.m. *Trudeau's Delusion: Canada as a Non-National Empire*. 12:10 p.m. *Quebec, Canada and the Economics of Nationalism*. 1:10 p.m. *Quebec: A Very Canadian National Independence Movement*. 2:10 p.m. *"The Lesser Breeds": Peoples of the World as Seen in the Great 11th Edition of the Encyclopaedia Britannica*. 3:10 p.m.

**FRIDAY, FEBRUARY 3**  
Women and Nationalism. 10:10 a.m. *Ethnicity and Nationalism in Mexican History*. 11:10 a.m. *Nationalism and the End of the Soviet Empire*. 12:10 p.m. *Yugoslavia and Ethnic Nationalism*. 1:10 p.m. *Ethnicity and Politics in Post-Independence Africa*. 2:10 p.m. *Brigands, Artists, Sorcerers, Hole-Dwellers, Wife-Swappers and Democrats in Strabo's Ethnology*. 3:10 p.m.

**SATURDAY, FEBRUARY 4**  
Multiculturalism and Racism: The Changing Face of Canadian Society, sponsored by UCAA. 10:30 a.m. *Luncheon following lectures*, sponsored by UCAA. Croft Chapter House. Tickets \$15 from Dina Garcia, 978-2968.

**Planning & Budget Committee.**

**TUESDAY, JANUARY 31**  
Council Chamber, Simcoe Hall. 5 p.m.

**Governing Council.**

**THURSDAY, FEBRUARY 2**  
Council Chamber, Simcoe Hall. 4:30 p.m.

**University Affairs Board.**

**TUESDAY, FEBRUARY 7**  
Council Chamber, Simcoe Hall. 4:10 p.m.

## MUSIC

**TRINITY COLLEGE**

**Choral Evensong.**

**WEDNESDAY, JANUARY 25 AND FEBRUARY 1**



## EVENTS

Trinity College Chapel Choir, Robert Hunter Bell, director. Trinity College Chapel. 5:30 p.m.

### FACULTY OF MUSIC EDWARD JOHNSON BUILDING Jazz Combos.

**WEDNESDAY, JANUARY 25**  
Don Engler and Kevin Turcotte, directors.  
Walter Hall. 8 p.m.  
**WEDNESDAY, FEBRUARY 1**  
Mike Murley, director. Walter Hall. 8 p.m.

### Thursday Noon Series.

**THURSDAY, JANUARY 26**  
Student chamber string ensembles. Walter Hall. 12:10 p.m.

**THURSDAY, FEBRUARY 2**  
Student chamber ensembles. Walter Hall. 12:10 p.m.

### U of T Symphony Chorus.

**FRIDAY, FEBRUARY 3**  
Janet Brenneman, conductor. Victoria College Chapel, 91 Charles St. W. 8 p.m.

### Faculty Artist Series.

**SATURDAY, JANUARY 26**  
William Aids, piano. Walter Hall. 8 p.m.  
Tickets \$15, students and seniors \$10.

**TUESDAY, FEBRUARY 7**  
Jazz performance teaching staff. Walter Hall. 8 p.m. Tickets \$15, students and seniors \$10.

### PLAYS & READINGS

#### The Tricks of Scapin.

**WEDNESDAY, FEBRUARY 1 TO**  
**SATURDAY, FEBRUARY 4**  
By Moliere, directed by Mimi Mekler.

Erindale Studio Theatre, Erindale College Theatre. Erindale 1994-95 season. Performances at 8 p.m. except Saturday 2 p.m. and 8 p.m. Tickets \$10, students and seniors \$7 (Saturday, \$12 and \$9). Reservations (905) 569-4369.



### EXHIBITIONS

#### ERINDALE COLLEGE Pictorial Anecdotes from the Eternal City.

**TO JANUARY 25**  
Andrew Frontini, recent works. Blackwood Art Gallery. Gallery hours: Monday to Friday, 12 noon to 5 p.m.; Sunday, by appointment.

#### JUSTINA M. BARNICKE GALLERY HART HOUSE **TO JANUARY 26** Out of Sight.

Art from the 60s selected from the Hart House Permanent Collection. East Gallery.

**The Graphic Eye.**  
Works on paper selected from the Hart House Permanent Collection. West Gallery.

#### Sydney Drum.

**FEBRUARY 2 TO MARCH 2**  
Paintings. Both Galleries. Gallery hours: Monday to Friday, 11 a.m. to 7 p.m.; Saturday and Sunday, 1 to 4 p.m.

### SCHOOL OF ARCHITECTURE & LANDSCAPE ARCHITECTURE

#### Student Work.

**TO JANUARY 31**  
Showcases recent student work.

#### L'Enfant's Plan: Vision of Washington.

**JANUARY 30 TO FEBRUARY 17**  
Historical exhibition of maps and plans documenting the development of Washington and proposals for future urban design. SALA Gallery, 230 College St. Hours: Monday to Friday, 9 a.m. to 5 p.m.

#### ROBERTS LIBRARY Masters of Polish Exlibris.

**TO JANUARY 31**  
Highlights the bookplate activity of many of Poland's major artists, co-sponsored by the Polish Heritage Society of Canada. Main display areas. Hours: Monday to Friday, 8:30 a.m. to midnight; Saturday, 9 a.m. to 10 p.m.; Sunday, 1 to 10 p.m.

#### FINE ART January 5.

**TO JANUARY 31**  
Recent works by Teresa Ascencio, Elaine Bowen, Jolene Brosch, John Hrivnak and Laura Stone, Department of Fine Art students. Upper Canada Brewing Company, 2 Atlantic Ave. Hours: Monday to Saturday, 10 a.m. to 8 p.m.; Sunday, 10 a.m. to 6 p.m.

#### VICTORIA COLLEGE

##### John M. Robson.

**TO FEBRUARY 10**  
Photographs. Ground and first floor, Northrop Fine Hall. Hours: Monday to Thursday, 9 a.m. to 8 p.m.; Friday, 9 a.m. to 6 p.m.

### SCARBOROUGH COLLEGE Seuil.

**TO MARCH 17**

Penelope Stewart, outdoor installation of three fabric banners, accompanied by a gallery component until Jan. 27. The Gallery. Gallery hours: Monday to Friday, 11 a.m. to 4 p.m.

### THOMAS FISHER RARE BOOK LIBRARY

#### Elegant Editions: Aspects of Victorian Book Design.

**TO MARCH 31**  
Documents developments in colour printing and the evolution of publishers' book-bindings, drawn from the Ruari McLean Collection at Massey College. Hours: Monday to Friday, 9 a.m. to 5 p.m.



### MISCELLANY

#### Choosing Child Care That Works.

**WEDNESDAY, JANUARY 25**  
A practical session on choosing child care. 2nd floor, 40 Sussex Ave. 12 noon to 1:30 p.m. Information: 978-0951. Office of the Family Care Adviser

#### U of T Fathers' Group.

**FRIDAY, JANUARY 27**  
Discussion and support group for faculty, staff and students who are fathers. Meeting Room, Hart House. 12:30 to 2:30 p.m. Information: 978-0951. Office of the Family Care Adviser

### Maternity Leave Planning for Faculty and Staff Members.

**TUESDAY, JANUARY 31**

For faculty and staff. 2nd floor, 40 Sussex Ave. 12 noon to 2 p.m. Registration: 978-0951. Office of the Family Care Adviser

### Public Forum on Depression.

**THURSDAY, FEBRUARY 2**

A Survivor's journey through Depression, Mike Wallace, CBS News; and Helen Huthinson, TV personality, on her experience with serious depression in conjunction with launch of fundraising initiative by the Clarke Institute of Psychiatry Foundation. Convocation Hall. 6:30 to 8 p.m. Bayshore Trust and Eli Lilly Canada

#### Kate Worthington.

**SUNDAY, FEBRUARY 5**

Erindale College Resident Dons Celebrity Branch Series. Spigel Hall, South Building, Erindale College. 11 a.m. Tickets \$12, students \$8. Information and reservations: (905) 828-5286.



### DEADLINES

Please note that information for Events listings must be received in writing at The Bulletin office, 21 King's College Circle, 2nd floor, by the following times:

Issue of February 6, for events taking place Feb. 6 to 20: MONDAY, JANUARY 23.

Issue of February 20, for events taking place Feb. 20 to March 6: MONDAY, FEBRUARY 6.

## ADMINISTRATIVE COMPUTING TASK FORCE

The President has established an Administrative Computing Task Force, to be co-chaired by Michael Finlayson and Dan Lang, and that will report to the Provost. This Task Force, composed of academic administrators and senior managers will be responsible for articulating the principles that will govern future systems development, and for developing ways of ensuring that the development of all future administrative systems serves the University's academic mission. A primary purpose of this Task Force is to identify the information that academic and other senior administrators require to do their jobs more effectively.

The Task Force's term will expire on 30 April 1995, by which time it will have made recommendations about how the University should in the future oversee the focused development of administrative systems and the relationship between these systems and the achievement of its academic mission.

### TERMS OF REFERENCE

In carrying out its role the Task Force will:

1. Develop the classifications for data, data usage, ownership and security that will be used to assign responsibilities for data.
2. Develop principles to govern which data should be accessible to all and data to which universal access is unnecessary.
3. Determine by what means, and to what extent, users need regular predetermined reports, on the one hand, and flexible data retrieval and analysis mechanisms to support unanticipated information requirements, on the other.
4. Review the assumption that all future systems should be purchased from external vendors and not developed internally.
5. Review the assumption that all future systems should be based on the same software platform and that the platform should be ORACLE.
6. To determine the principles and criteria which will guide:
  - i. the level of integration of information systems
  - ii. the acquisition and development of information systems
  - iii. the maintenance and management of information systems
  - iv. the appropriate balance between academic, administrative, and generic systems structures
7. Recommend the appropriate structure for implementing the recommendations after April 1995.

### MEMBERSHIP

Professor Michael G. Finlayson, Vice-President, Administration & Human Resources (co-chair)  
Dr. Dan W. Lang, Vice-Provost, Planning & Budget and Assistant Vice-President (Planning) (co-chair)  
Dr. Arnold Aberman, Dean, Faculty of Medicine  
Professor Carl Amrhein, Chair, Department of Geography  
Professor George Luste, Associate Dean, School of Graduate Studies  
Professor Ian Orchard, Associate Dean, Sciences, Faculty of Arts & Science  
Professor Derek McCommond, Vice-Provost, Office of the Vice-President & Provost  
Mr. George Altmyer, Registrar, Faculty of Arts & Science  
Professor Heather Munroe-Blum, Vice-President, Research & International Relations  
Mr. Patrick Phillips, Director of Administration, Scarborough College  
Professor Martin Moscovitz, Chair, Department of Chemistry  
Professor Cecil Houston, Associate Dean, Social Sciences, Erindale College  
Professor Andrew Clement, Faculty of Library & Information Science  
Professor Becky Reuber, Faculty of Management  
Professor Peter Boulton, Associate Chair, Department of Electrical & Computer Engineering  
Mrs. Elizabeth Zeidman, Department of Family & Community Medicine, Toronto General Hospital  
Mr. Chris Handley, Director, Rethinking Administration

#### Submissions

All submissions are welcome and should be sent to Chris Handley, Room 245, Simcoe Hall, before February 10, 1995.

## WINTER CLINICAL MASSAGE ASSOCIATES

- head aches
- neck pain
- low back strain
- rehabilitation due to trauma or illness

As a U of T faculty or staff member, your extended health care plan covers massage therapy.

### P. ANNE WINTER, R.M.T.

Registered Massage Therapist

The Medical Arts Building,  
170 St. George Street, Suite 528  
928-1723

## The Bulletin

invites readers to submit information regarding awards and honours as well as death notices of staff and faculty. Please include as much background information as possible and in the case of obituaries, a CV is especially welcome.

Please send, deliver or fax the information to:

JANE STIRLING, EDITOR,  
21 King's College Circle, 2nd floor,

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## CURRENT EQUITY FACULTY HIRING PRACTICES IN CANADIAN UNIVERSITIES

EVIDENCE AND INTERPRETATIONS

### SYMPOSIUM & DEBATE

- ANTI-EQUITY: Dr. Grant Brown  
Faculty of Management  
University of Lethbridge
- PRO-EQUITY: Dr. Jim Brown  
Department of Philosophy  
University of Toronto
- MODERATOR: Dr. Joan Foley  
Department of Psychology  
Scarborough College  
Former Vice-President and Provost  
University of Toronto

With Discussion by Four Other Panelists and by the Audience

Debates Room, Hart House  
Thursday, February 2, 1995  
2:00 - 4:00 p.m.

Light refreshments served.

For further information contact Prof. John Furedy, 978-3020

This symposium is sponsored by the Society for Academic Freedom and Scholarship (978-7062)

With the assistance of the Donner Foundation and the Office of the Vice-President and Provost (978-2122)

ALL MEMBERS OF THE UNIVERSITY COMMUNITY WELCOME

## Family Care

at the  
University of Toronto

### Winter workshops, seminars, and groups:

Choosing child care that works  
Jan. 25

Birthing Alternatives:  
The role of the midwife  
Jan. 26

Maternity leave planning (faculty and staff)  
Jan. 31, Mar. 29

Fathers' discussion and support group  
Jan. 27, Feb. 24

Human rights for gay and lesbian  
couples and families  
Feb. 3

Help! I'm the parent of a teenager!  
Date t.b.a.

Elder Care: Long term care for the elderly  
Feb. 23

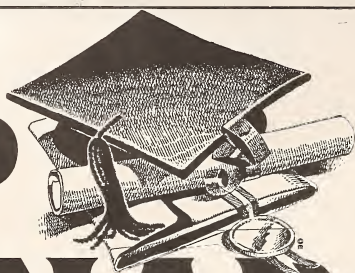
Elder Care: Home services for the elderly  
Mar. 1

All events are free, but some require pre-registration.  
For further information, call 978-0951.



**Family Care Advisor**  
University of Toronto  
(416) 978-0951  
(416) 971-2289 (fax)

# RRSP SEMINARS



*Free to Members.  
\$10 Charge for  
Non-Members*

All Toronto seminars take  
place in Room 2-214 at  
252 Bloor Street West.

All Scarborough seminars  
take place in room C-211-E,  
at 41 Progress Crt.,  
Centennial College.

The Basics seminars run from  
7:00 pm - 8:30 pm and the  
Advanced seminars run from  
7:00 pm - 9:00 pm. Advance  
registration is required. The  
registration form is available at  
any branch of Metro Credit  
Union, or telephone  
Samantha Hutchinson  
at 978-3900.

## RRSPs: THE BASICS

January 23 - Toronto  
January 30 - Toronto  
February 8 - Scarborough

## RRSPs: ADVANCED PLANNING

February 1 - Toronto  
February 2 - Toronto  
February 9 - Scarborough



College Street	978-5505
York Campus	736-5052
Ryerson Campus	979-5130
Brown's Line	252-5621
Humber Campus	675-5086
East York	469-5329
Toronto Hospital	340-3888
Scarborough Branch	438-3860



# CLASSIFIED

A classified ad costs \$15 for up to 35 words and \$50 for each additional word (maximum 70). Your phone number counts as one word, but the components of your address will each be counted as a word. No charge for postal code. A cheque or money order payable to **University of Toronto** must accompany your ad. Ads must be submitted in writing, 10 days before *The Bulletin* publication date, to Nancy Bush, Department of Public Affairs, 21 King's College Circle, 2nd Fl., Toronto, Ontario M5S 1A1. Ads will not be accepted over the phone. To receive a typeset and/or receipt please include a stamped self-addressed envelope. For more information please call: 978-2106.

## ACCOMMODATION RENTALS AVAILABLE -METRO & AREA-

**Short- or long-term apartment.** Annex — one-bedroom, fully equipped, immaculate, quiet, smoke- and pet-free. 5 appliances, parking, \$300 per week. Walk to U of T. Available immediately (3 week minimum). (416) 967-6474.

**May 1 — July 31, 1995 or portion thereof.** Large, elegant, fully furnished, four-bedroom, first-floor duplex, south Moore Park adjacent to Whitney School. 3 1/2 baths, large principal rooms, huge basement rec. room, \$3,500/month, negotiable. (416) 480-4616 (day), (416) 488-5274 (evening).

**Cheery basement apartment.** Refrigerator, stove, private bathroom, semi-furnished. Lots of closet space. Separate entrance. Steps to Ossington subway, Bloor. Utilities, cable, laundry included in \$425. No smoking/pets. Available February 1. 531-4234, leave message.

**House in Toronto:** 3 minutes to Chester subway, close to schools, shopping, 15 minutes to University of Toronto and downtown hospitals. Available for 1 year from July 1995 to July 1996. Three stores, fully furnished, three bedrooms and two studies, one full bathroom and two half-bathrooms, dining-room, living-room. Private yard, parking. \$1,400/month plus utilities. No pets, non-smokers. (416) 463-8988.

**Available now: Annex rental.** Nicely furnished 2-bedroom, 2-bath apartment. Trees, deck, linens, dishes. Steps to downtown campus. \$1,125 inclusive. 351-1554.

**Downtown — St. Lawrence Market.** Split-level 1-bedroom, furnished, study/bed. Air-conditioned, hardwood floors. Quiet, sunny, spacious. 20 minutes TTC to U of T. \$875 all inclusive. (416) 367-8454.

**Bring only clothes —** beautifully furnished 1-bedroom condo across St. George subway/Bloor. Includes utilities. Initially available January-March, possibly April on. Ideal for visiting faculty/grad student. Tel. (416) 724-4227.

**Rosedale coach house,** ideal sabbatical accommodation, garden setting, subway, renovated, bright, spacious living-room, large bedroom, small 2nd bedroom/study,

4-piece bath, 6 appliances, parking. Available July 1. Furnished \$2,050 plus utilities. 928-5711.

**2-bedroom ground-floor duplex** in quiet residential district three blocks from U of T campus. Separate dining-room, living-room and sun-room. Access to backyard. Full kitchen and laundry. Available semi-furnished or unfurnished. Ideal for sabbaticans or exchange professors, among others. Call 921-7127.

**Beaches.** Steps from boardwalk and TTC, tastefully furnished three-bedroom house with beautiful lake views and fireplace. 10 minutes from downtown Toronto. Available to responsible tenant after February 1. \$1,700/month plus utilities. Call (416) 699-8665.

## ACCOMMODATION RENTALS REQUIRED

The right room for rent and/or housekeeping opportunities wanted! Resourceful, responsible, non-smoking, self-employed female seeks large, peaceful living space with light, warmth, character and/or flexible potential. Duration, financial terms, home sharing/caring responsibilities all negotiable. U of T Faculty references. 961-7405, 485-5975.

**Going away in 1995?** Clean, quiet, responsible and resourceful non-smoking female seeks short or long-term house. Will look after plants, pets, bills, etc. Duration, financial terms negotiable. Excellent references available. Lynn, 340-3993 days.

**Home stay with Canadian family,** room and board required for male university student from Japan. 5 weeks in February-March. Central location preferred. Please call (905) 936-6499.

## ACCOMMODATION SHARED

**Yonge/Eglinton.** Furnished quiet house, 2 baths, 6 appliances, garden, parking, TTC for non-smoking career woman. \$650/month. 485-0041 evenings.

## ACCOMMODATION OVERSEAS

**Sabbatical in Avignon.** Restored ancient farmhouse on a hill overlooking Provencal valley, marvellous views, secluded hamlet,

not isolated; 800 metres to village school-house; 4 bedrooms, two baths (one en suite); double living-room, central heat, fully equipped, heated swimming pool (separate from house, can be closed down if not needed). September 1 — June 30. \$1,475/month (includes pool maintenance). 978-8637, 928-0122.

## BED & BREAKFAST

**Award-winning home.** Immaculate, smoke- and pet-free. Quiet nooks and crannies for reading and relaxing. Healthy breakfasts and we cater to diets. Walk to U of T, ROM. Parking. \$80 daily for two, \$65 for one. (416) 967-6474.

## HOUSES & PROPERTIES FOR SALE

**Special country home:** 2 hours northeast of Toronto. Complete privacy. 6+ acres white pine/mixed wood on river. Unique rustic-style house; large windows, pine ceilings, skylights, wood stove; spacious study/sun-room, living-room, modern kitchen/dining-room, 2bdrms. Garage, out-buildings. Lovely pine A-frame chalet, steeping loft, wood stove, screened porch. Must sell. \$165,000. 923-6641 x2393 (messages).

**Steps to U of T.** Renovated, upscale executive. Comfortable 3-storey, 10' ceilings, 3 large bedrooms, en suite study, 2 baths, in-door spa, fireplace, main-floor den, CAC, garage and more. Note a thing to do. Asking \$359,000. Call Nancy or Barry Freeman, 535-3103, Barry Freeman Real Estate Ltd.

**Steps to U of T.** A completely renovated 3-storey Victorian home maintaining its original integrity. 8 large rooms, 3 fabulous baths, 3/4 bedrooms, large cooks kitchen, antique marble fireplace, deck, garden, garage plus a fabulous self-contained 1-bedroom apartment for income or in-laws. Asking \$289,000. Call Nancy Freeman, 535-3103, Barry Freeman Real Estate Ltd.

**Annex-Seaton Village.** Walk to U of T. Two terrific renovated Victorians, 1 modern, 1 traditional, both 2 storeys, 2 baths, double garages, wonderful details. Asking \$272,000 and \$289,000. Call Elden Freeman, 535-3103, Barry Freeman Real Estate Ltd.

**Annex-Seaton Village.** Walk to U of T. Detached, country friendly 2-storey, 3 bedrooms plus library, double garage, CAC,

Asking \$229,000. Call Elden Freeman, 535-3103, Barry Freeman Real Estate Ltd.

## WORD PROCESSING

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## MISCELLANY

**PERSONAL COUNSELLING** in a caring, confidential environment. U of T staff extended health care benefits provide excellent coverage. Dr. Ellen Greenberg, Registered Psychologist. The Medical Arts Building, 170 St. George Street, 961-3683.

**ACCENT NEED ADJUSTMENT?** Communications enhancement courses in speaking and writing for English as Second Language Speakers with good language skills. Groups of 6-8. Over 2,500 satisfied graduates. Now in its 10th year. Gandy Associates. 533-1933.

**Psychologist providing individual, group and couple therapy.** Personal and relationship issues. U of T extended health plan covers psychological services. For a consultation call Dr. Heather A. White, 535-9432, 140 Albany Ave. (Bathurst/Bloor).

**INDIVIDUAL & COUPLE THERAPY.** Extended health benefits provide full coverage for U of T staff. Dr. Gale Bidwell, Registered Psychologist, 114 Mainland Street (near Wellesley and Jarvis). 972-6789.

**Victoria B.C. Real Estate.** Experienced, knowledgeable realtor with university faculty references. Will answer all queries and send information about retirement or investment properties in Victoria. No cost or obligation. Call (604) 596-3200 or write Lois Dutton, RE/MAX Ports West, 3200 Shelbourne Street, Victoria B.C. V8P 5G8.

**MASSAGE THERAPY** naturally effects a relaxation response. Enjoy a quiet retreat from the stress of daily life. The experience will rest and refresh your body and mind. Bloor/St. George location. By appointment. Kathy Dillon, R.M.T. 787-1070.

**Phyllis' Place of Esthetics.** Your beauty solution at 186 St. George at Bloor. Offering

very good rates. In the business for twenty-five years. Facials: \$35. Pedicures: \$25. Waxing and many more treatments available. Please call 926-9449.

**Violet Head, Registered Psychologist.** Individual, family and group psychotherapy. Work with other cultures, women's issues, addictions, depression, etc. U of T staff health benefits cover cost. 200 St. Clair Ave. W., Suite 404, Toronto M4V 1R1. 922-7250.

**Registered Massage Therapist** and certified Feldenkrais Practitioner covered by extended health care benefits. An intelligent, nurturing, body-centred approach to stress reduction, self-awareness, posture/breath/energy and psycho-physical congruence. St. George/Bloor. Shelley Duke, 465-5975.

**Group psychotherapy** is often the treatment of choice for interpersonal problems and low self-esteem. Highly experienced co-therapists (male and female). Individual therapy is also available. University health plan covers services. Dr. Herbert Pollack, Registered Psychologist, 515-1708, Avenue Road and St. Clair Ave.

Participants who have been diagnosed with Alzheimer's disease and who live within reasonable commuting distance from Toronto are needed for a research project. The study tests memory function using a touch-screen computer. We bring our equipment to you. Remuneration. For further information please call (416) 231-0288 and leave a message.

**CALLING ALL PARENTS ....** Parents of adult children (20-30 years) are needed to volunteer their time for M.A. thesis research on stress, coping and family functioning. Participants will be mailed four questionnaires. Can you help? Please call Alison Peck, 789-4339.

**COGNITIVE-BEHAVIOURAL THERAPY.** Specializing in anxiety/phobias, depression and irritable bowel syndrome. Dr. Shalagh Emmott, Registered Psychologist. Covered by U of T extended health benefits. College/University area. Voice mail 340-4800 ext. 8170.

**Garage for rent.** Double cement floor, near Spadina and Harbour (Robert Street), \$120 monthly. 425-8910.

**Wanted: used Macintosh** with colour monitor, in good condition. Please contact Edward Shorter, 978-2124.

## Governing Council Academic Board Election 1995

### Nominations Close

Nominations close January 27th at noon.

Nominations for the following Governing Council and Academic Board elections close this Friday:

**Governing Council - teaching staff, administrative staff, and students**  
**Academic Board - teaching staff**

Nomination forms are available in Room 106, Simcoe Hall or at the Registrar's Offices at Scarborough and Erindale Colleges. For further information, please call Susan Girard at 978-8428.

The membership should reflect the diversity of the University. Nominations are, therefore, encouraged of a wide variety of individuals.



# PHD ORALS

Graduate faculty please call the PhD oral examination office at 978-5258 for information regarding time and location for these listings.

## MONDAY, JANUARY 23

John Lawrence Benice, Department of Education, "Towards a More Authentic and Feasible Science Curriculum for Secondary Schools." Prof. D. Hodson.

Marta Anna Chyczaj, Department of Education, "The Relationship of Practical Attributes to Academic Aptitude and Employment-Related Experience." Prof. P.H. Lindsay.

Ramin Rahmehy Farnood, Department of Chemical Engineering & Applied Chemistry, "Sensing and Modelling of Forming and Formation of Paper." Profs. C.T.J. Dodson and S.R. Loewen.

Rebecca Lee Green, Faculty of Music, "Power and Patriarchy in Haydn's Golden Operas." Prof. M.A. Parker.

C. William L. Pickett, Department of Community Health, "Psychoactive and Other Medication Risk Factors for Non-Fatal Agricultural Injury in Ontario." Prof. M. Chipman.

Mary Margaret Robison, Department of Botany, "Mitochondrial Plasmids of *Agaricus*." Prof. P.A. Horgen.

Shen-Ling Xia, Faculty of Dentistry, "Calcium Signalling in Bone Cells in Response to Mechanical Perturbation and Calcitonin." Prof. J.M. Ferrier.

## TUESDAY, JANUARY 24

Stephany Marie Biello, Department of Zoology, "Neuropeptide Y and Non-Photoc Phase Shifts." Prof. N. Mrosovsky.

Mathew William DeCoursey, Centre for Comparative Literature, "Rhetoric and Sign Theory in Erasmus and Tyndale." Profs. E. Kushner and G.T. Warkentin.

Barbara Lynne Keet, Department of Immunology, "Analysis of the *in vitro* Requirements for B Lineage Commitment and Differentiation from Bipotent B Cell-Macrophage Precursors Isolated from Murine Fetal Liver." Prof. C. Paige.

Ajay Tripathi, Department of Electrical & Computer Engineering, "Fast Response Three Phase Fixed Frequency Static Power Supply." Prof. S.B. Dewan.

## WEDNESDAY, JANUARY 25

Zuohao Cao, Department of Physics, "Moist Potential Vorticity Generation in Extratropical Cyclones." Prof. H.-R. Cho.

Giovanni Facciponte, Department of Zoology, "Characterization of a Novel Central Pattern Generator in *Locusta* and Modulation of Its Motor Targets." Prof. A.B. Lange.

Bonnie Lynn Kuehl, Department of Medical Biophysics, "The Involvement of DT-Diaphorase in Mitomycin C Sensitivity and in a Cancer-Prone Phenotype." Prof. A.M. Rauth.

John Joseph Kuta, Department of Physics, "Optical Response of Micron Period Metal Lamellar Gratings." Prof. H.M. van Driel.

Jeffrie Laurent de Verteuil, Department of Geology, "Miocene Dinoflagellate Cyst Taxonomy and Biostratigraphy of the Chesapeake Group, Salisbury Embayment, U.S.A." Prof. G. Norris.

Michelle Ann Mullen, Institute of Medical Science, "Fetal Tissue Transplantation: Ethical Issues, Women's Health and Public Policy." Prof. F.H. Lowy.

Hiroko Seya, Department of Education, "The Linguistic Impact of a Study Abroad Program on Individual Japanese College Students: A Case Study." Prof. B. Harley.

## THURSDAY, JANUARY 26

Rhona Deborah Charron, Department of Education, "A Method for Teaching Graph Selection Using Examples and Counterexamples." Prof. R.S. McLean.

Li-Kun Chiu, Department of Chemical Engineering & Applied Chemistry, "A Stochastic Model to Describe Polymer Degradation and Drug Release from Degradable Polymer Matrices." Prof. Y.-L. Cheng.

Philip Patrick Duggan, Department of Physics, "Infrared Difference Frequency Spectroscopy as a Probe of Molecular Dynamics: Lineshape Studies of the CO Fundamental Band." Prof. J.R. Drummond.

Sied Mehdi Fakhrnia, Department of Electrical & Computer Engineering, "Hardware-Compatible Implementations for Artificial Neural Networks." Profs. K.C. Smith and J.M. Xu.

Kanjana Ganeshan, Department of Chemistry, "Novel Approaches to the Synthesis of Branched Oligonucleotides Related to Splicing Intermediates." Prof. M.J. Damha.

Hui Li, Department of Computer Science, "Software Approaches to Memory Latency Reduction on Large-Scale Shared Memory Multiprocessors." Prof. K.C. Sevik.

Rizwan Malik, Centre for South Asian Studies, "Mawlana Husayn Ahmad Madani and Jam'iyyat 'Ulama-i Hind 1920-57: Status of Islam and Muslims in India." Profs. N.K. Wagle and M. Israel.

James David Powell, Department of Physics, "Constraints of the

Low-Energy E1 Cross Section of  $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$  from the  $\beta$ -Delayed  $\alpha$  spectrum of  $^{16}\text{N}$ ." Prof. R.E. Azuma.

Yasunori Takeuchi, Department of Chemistry, "Photo and Radiation Chemistry of Polymers." Prof. J.E. Guillet.

Shaopeng Ying, Department of Electrical & Computer Engineering, "Study of Microgap Discharges and Television Interference." Prof. W. Janischewsky.

## FRIDAY, JANUARY 27

Darren Douglas Browning, Department of Zoology, "The Regulation and Function of GTP Binding Proteins during Sexual Development of *Dityotetulum Discoidium*." Prof. D.H. O'Day.

Jane Ellen Dalton, Department of Education, "Investigating Co-Learning: A Life History of a Classroom Focusing on Meaning-Making, Relationship and Knowledge Production." Prof. J. Weiss.

Kudret Demirli, Department of Industrial Engineering, "Fuzzy Inference and Its Application to Self-Navigating Systems." Prof. I.B. Turksen.

Mark Adrian Luscher, Department of Immunology, "Chemical Dynamics and T Cell Recognition of H-2D<sup>b</sup> at the Cell Surface." Prof. B. Barber.

William James Newbigging, Department of History, "History of the French-Ottawa Alliance, 1613-1763." Prof. S. Van Kirk.

Sean Alexander Fitzgerald Peel, Faculty of Dentistry, "The Influence of Substratum Modification on Interfacial Bone Formation *in vitro*." Prof. J.E. Davies.

Sarah Potheary, Department of Classical Studies, "Strabo and the 'Inhabited World'." Prof. A.R. Jones.

Wenzhi Ren, Department of Physiology, "Identification and Characterization of the Novel Neuronal Protein: NP25." Prof. D.H. Osmond.

Albert Schrauwers, Department of Anthropology, "In Whose Image? Religion, Ethnicity and Development among the To Pamona of Central Sulawesi, Indonesia." Prof. S. Nagata.

Andrea Kadi Schutz, Centre for Medieval Studies, "Therionorphic Shape-shifting: An Experimental Reading of Identity and Metamorphosis in Selected Medieval British Texts." Prof. D.N. Klausner.

Andrew Thomas Seeley, Centre for Medieval Studies, "St. Thomas

Aquinas on the Necessity of the Gifts of the Holy Spirit for Salvation." Prof. J. Goering.

Richard Wallace White, Frederic Benard, Department of Physics, "Search for Leptoquarks in Electron-Proton Collisions." Prof. D.C. Bailey.

MONDAY, JANUARY 30  
Tanner Bilgic, Department of Industrial Engineering, "Measurement - Theoretic Frameworks for Fuzzy Set Theory with Applications to Preference Modelling." Prof. I.B. Turksen.

Hong Chen, Department of Physics, "A Microscopic Study of Pairing and Quadrupole Forces in Nuclei." Prof. D.J. Rowe.

Kam Hon Chu, Department of Economics, "The Monetary and Banking System of Hong Kong: A Study from a Free Banking Perspective." Prof. J.W. Carr.

Anna Maria Rosaria Gaspari, Department of Italian Studies, "Retorica e Strategie Narrative nel Tirreno di Pietro Giannone." Prof. D. Pietropaolo.

Liangsheng Li, Department of Mathematics, "Classification of Simple C\*-algebras: Inductive Limit of Matrix Algebras over 1-Dimensional Spaces." Prof. G.A. Elliott.

Paul Joseph Paddon, Department of Physics, "Stability of Polarization Modes in a Quasi Isotropic Laser." Prof. A.D. May.

Abdullah Hakim Quick, Department of History, "Aspects of Islamic Social Intellectual History in Hausaland: Uthman ibn Fudi, 1774-1804 C.E." Prof. M.A. Klein.

Margaret Elizabeth Rae, Graduate Centre for Study of Drama, "The Christopher Newton Years at the Shaw Festival." Prof. A. Saddlemyer.

Zhirong Tang, Department of Electrical & Computer Engineering, "Thin  $\alpha$ -Si: H Emitter/SiGe Base Heterojunction Bipolar Transistors." Prof. C.A.T. Salama.

Yan Xu, Department of Cellular & Molecular Pathology, "Enzymatic Dissolution of Calcium Pyrophosphate Dihydrate Crystals." Profs. K.P.H. Pritzker and T.F. Cruz.

TUESDAY, JANUARY 31  
Kathy Myung Hi Chun, Department of Biochemistry, "Characterizations of Mutations in

the E Subunit of the Pyruvate Dehydrogenase Complex." Prof. B.H. Robinson.

Heather Cook, Department of Zoology, "The Involvement of Serotonin in Feeding in the Blood-Sucking Insect *Rhinidius Prolixus*." Prof. I. Orchard.

Paolo Fasoli, Department of Italian Studies, "G. Chiabrera: letterato barocco." Prof. A. Franceschetti.

Shahnaz Khan, Department of Education, "Muslim Women: Interrogating the Construct in Canada." Prof. R.I. Simon.

Melanie Lorraine Ledgerwood, Department of Physics, "Phonon Dynamics and Self-Energy Effects in Highly Photo-Excited Germanium." Prof. H.M. van Driel.

Tamara Faith O'Callaghan, Centre for Medieval Studies, "Giving Voice to Passion: Love in Benoit de Sainte-Maure's *Roman de Troie*, John Gower's *Confessio Amantis* and Geoffrey Chaucer's *Troilus and Criseyde*." Prof. B.H. Robinson.

Mary Wiktorowicz, Department of Community Health, "Regulating Biotechnology: A Model of Rational-Political Policy Development." Prof. R.B. Deber.

Hong Zhao, Department of Industrial Engineering, "Automatic Generation and Reduction of the Semi-Fuzzy Knowledge Base in Symbolic Processing and Numerical Calculation." Prof. I.B. Turksen.

## WEDNESDAY, FEBRUARY 1

Robert Cywes, Institute of Medical Science, "The Role of Platelets in Hepatic Allograft Preservation-Reperfusion Injury." Prof. G.A. Levy.

## FRIDAY, FEBRUARY 3

Hongbo Su, Department of Chemistry, "Interfacial Nucleic Acid Chemistry Studied by Liquid-Phase Acoustic Network Analysis." Prof. M. Thompson.

## MONDAY, FEBRUARY 6

Kim Fung Edward Lee, Department of Electrical & Computer Engineering, "Field-Programmable Analog Arrays Based on MOS Transconductors." Prof. P.G. Gulak.

## TUESDAY, FEBRUARY 7

Kerry Steven Lowe, Department of Electrical & Computer Engineering, "Gate Sizing and Buffer Insertion Methods for Optimizing Delay and Power in CMOS and BiCMOS Logic Networks." Prof. P.G. Gulak.

Catherine Stanley, Department of Mathematics, "The Decomposition of Automorphisms of Modules Over Rings." Prof. E.W. Ellers.



# RESEARCH NOTICES

For further information and application forms for the following agencies, please contact University of Toronto Research Services (UTRS) at 978-2163.

## INTERNATIONAL

**AKA KHAN FOUNDATION CANADA**  
The fellowship program in international development management is designed to provide training in Canada and field experience in Asia to outstanding young Canadians committed to pursuing a career in international development. The program consists of a three-week management seminar in Ottawa, followed by a six-month work placement with a South Asian non-governmental organization. Participants will be placed with organizations working in different aspects of development such as health, education, natural resource management and micro-enterprise development. Applicants must be Canadian citizens or landed immigrants, be between 18 and 29 years of age and hold, at minimum, an honourable bachelor degree. Those with professional designations such as RN, CA, PAg and PEng will also be considered. For further information and an application package, contact Aka Khan Foundation, Constitution Square, 350 Albert St., Suite 1820, Ottawa K1R 1A4, telephone (613) 237-2532, fax (613) 567-2532. Deadline is February 20.

## FOREIGN AFFAIRS & INTERNATIONAL TRADE CANADA

**The Barton awards in international peace and security are intended to assist** Canadians who wish to pursue PhD studies or post-doctoral research in areas related to international peace and security from a Canadian perspective, with particular emphasis on arms control, disarmament, defence and conflict resolution. For further information and application forms contact: Program Officer, International Council for Canadian Studies, 2 Daly Ave., Ottawa K1N 6E2, telephone (613) 232-0417. Deadline is February 28.

## INTERNATIONAL LIFE SCIENCES

**INSTITUTE/US.AGENCY FOR INTERNATIONAL DEVELOPMENT Opportunities for Micronutrient Interventions (OMNI) requests proposals** for development and testing of new, creative and effective approaches to increase intake of micronutrient rich foods. Applications from multidisciplinary teams currently conducting field operations research are of particular interest. Teams comprising program practitioners, communicators and field-oriented researchers are encouraged to apply. The project must be carried out in developing countries eligible for USAID funds. Budget should not exceed \$50,000. For details contact Paula Trumbo, OMNI Research at the ILSI Human Nutrition Institute, 1126 16th St. N.W., Washington, D.C. 20036, telephone (202) 659-0799, ext. 182, fax (202) 659-3617. Deadline is March 31.

## PEOPLE'S REPUBLIC OF CHINA

**The China/Canada scholars and students exchange program is a bilateral government-sponsored project to encourage** Canadians to study and do research in China. Applicants should be either faculty members or graduate students with at least moderate Chinese language proficiency. Applicants are expected to

conduct studies or research in Chinese studies or related fields. For further details on how to apply, faculty members should contact Thomas Wu, International Programs, at 978-4649; students should contact the International Student Centre at 978-2564. Deadline is March 1.

## MEDICINE & LIFE SCIENCES

**FIGHT FOR SIGHT, INC. (US)**  
Support is available for research in ophthalmology, vision and related sciences under the following programs: grants-in-aid; post-doctoral fellowships; and student fellowships. Only one application for each type of award will be accepted from an investigator's laboratory. There are no citizenship requirements, however, applications from foreign nationals for research studies outside the US or Canada will be considered in instances where requests are unique in concept or where circumstances provide exceptional opportunities for proposed research. Applications from Americans or Canadians who wish to study abroad will be considered if the investigation cannot be carried out as effectively in the US or Canada. Deadline for all programs is March 1.

## MCDONNELL-PEW PROGRAM IN COGNITIVE NEUROSCIENCE

A limited number of training awards are available for 1994-95 for exceptional young scientists seeking post-doctoral training outside the field of their previous training. Stipends will be funded for up to three years at the prevailing rates of the host institution. Research grants are available for collaborative work by cognitive neuroscientists. Applications are sought for projects of exceptional merit that are not currently fundable through other channels. Support is limited to \$30,000 per year for two years, non-renewable. Indirect costs to be included in the \$30,000 at the rate of 10 percent of total salaries and fringe benefits. Deadline for both programs is February 1.

## MILES(BAYER)/CANADIAN RED CROSS SOCIETY RESEARCH & DEVELOPMENT FUND

**Miles(Bayer)/CRCS invites applications for project operating grant money** for research in the area of blood products and related fields. Such research may be basic, clinical or applied and encompass blood banking, immunohematology, hematology, infectious diseases, immunology, genetics, protein chemistry, molecular and cell biology, clinical medicine, laboratory sciences, epidemiology, microbiology, virology, biotechnology and biotechnology. Candidates must be researchers working in a Canadian institution. Initial application is by letter of intent with invited full application. The usual University application procedures and signature requirements apply. Deadline is February 15.

## MUSCULAR DYSTROPHY ASSOCIATION OF CANADA

**The association will support 10 medical or science students to work for three months** in summer 1995 in laboratories doing neuromuscular research. The stipend value is \$6,000 and eligible candidates

must be in their 3rd or 4th year of studies. Nominations are accepted from supervisors operating an active neuromuscular research laboratory support by MDAC or another major grant agency. Deadline is February 15.

## NATIONAL MULTIPLE SCLEROSIS SOCIETY (US)

**The society supports fundamental as well as applied studies, non-clinical or clinical in nature, including projects in patient management, care and rehabilitation.** Funding is available for research grants, post-doctoral fellowships and senior and junior faculty awards. Some citizenship restrictions apply to certain personnel support programs. Before submitting a proposal for research support, investigators must consult the society directly to determine whether the research plan is appropriate and relevant to the society's aims. Application forms must be requested from the society following approval of the research proposal. An indirect cost component is permitted for foreign institutions under certain circumstances and U of T investigators are advised to contact UTRS to discuss this budget allocation prior to completing a full research grant application. Deadline for both training and research grants is February 1.

## THYROID FOUNDATION OF CANADA

**The foundation is offering a limited number of summer student research scholarships of \$3,000** tentative in Canadian medical institutions. The research project should be concerned with the thyroid gland or its related problems, be capable of completion within three months and be supervised by an investigator in the host institutions with a major recognized interest in thyroid functions. Only one application will be accepted from each medical school. Interested medical students should contact the research office of the Faculty of Medicine for details of specific internal deadlines. Non-medical students should contact UTRS prior to the submission deadline.

The 1995 research fellowship is open to post-doctoral candidates in the life sciences in the field of thyroid function and disease. Consideration may be given to candidates with a master's degree working towards a doctorate with a research base related to the thyroid. The fellowship is valued at \$30,000 for one year, tenable at a university or research institution in Canada. Deadline for both programs is February 28.

## PHYSICAL SCIENCES & ENGINEERING NATURAL SCIENCES & ENGINEERING RESEARCH COUNCIL

**The following non-care NSERC programs will be phased out as follows:** general research grants — final grants in 1996/97; science policy scholarships — final competition February 1995; 1967 science and engineering scholarships — applicants to the current competition are not eligible for a regular PCS award; Canada international fellowships — final competition February 1995; undergraduate student research awards — competition for 1995 awards will be the last (large universities only); women's

faculty award — final competition January 1995; foreign researcher award — current competition will be the last; university-government programs — final competitions under DFO and AES agreements will be held in 1995. Grants will be awarded for one year only (note: applications involving industry will be reviewed under university-industry programs); scientific publication grants — final competition February 1995 (one-year awards only); conference grants — final competition February 1995.

## NORTH ATLANTIC TREATY ORGANIZATION

**NATO collaborative research grants give** scientists with joint projects being carried out between research teams in universities or research institutions in different NATO countries (Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, Turkey, UK, US) that rely for basic costs on national funding but where the costs for the international collaboration cannot be met from other sources. The grants support travel and living expenses of investigators visiting the partner institutions abroad. All fields of science are eligible but emphasis is given to fundamental aspects rather than to technological development. Preference is given to projects where the expertise, facilities and data sources of the research teams are complementary. Awards in the range of \$6,000 are made during initial period of one year and may be renewed. Although applications may be submitted at any time, the next deadline is March 31.

NATO advanced research workshops (ARWs) are working meetings aimed at contributing to the assessment of existing knowledge of a topic and identifying directions for future research. They should be co-directed by a scientist from a cooperation partner country (Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovak Republic, Tajikistan, Turkmenistan, Ukraine, Uzbekistan) and a scientist from a NATO country; they may be held in either a NATO country or a cooperation partner country, in the priority areas (disarmament/ technologies; environment; high technology; and human resources). Funding is provided to cover organizational expenses and the travel and living expenses of key speakers and partial coverage of expenses for some other participants. Applications should be submitted on the appropriate forms and may be sent at any time; they will be considered at the following meeting of the advisory panel on the priority area concerned.

The objective of NATO advanced study institutes (ASIs) is to disseminate advanced knowledge not yet in university curricula and foster scientific contacts through high-level teaching courses. The committee would welcome teaching activity lasting 10 days; the meeting normally has 12 to 15 lecturers and 60 to 80 ASI students of different nationalities. Awards are available to organizers to cover organizational

expenses, the costs of lecturers and part of the costs of ASI students. Applications may be submitted at any time.

## UPCOMING DEADLINES

**JANUARY 30**  
Retinitis Pigmentosa Eye Research Foundation, Inc. — research grants, scholarships, fellowships, studentships  
**JANUARY 31**  
Amyotrophic Lateral Sclerosis Society of Canada — research grants  
Ontario Ministry of Transportation — highway safety research grants  
**FEBRUARY 1**  
Alcoholic Beverage Medical Research Foundation — research grants  
Arthritis Society — studentships  
Canadian Cystic Fibrosis — summer student awards  
Epilepsy Canada — summer studentships  
Harry Frank Guggenheim Medical Research Foundation for studies concerning violence and aggression  
Rick Hansen/Man in Motion League Fund — fellowships, studentships  
Hereditary Disease Foundation — research grants  
Loukemia Research Fund of Canada — research grants, fellowships  
McDonnell-Pew Program in Cognitive Neuroscience — training awards, research grants  
National Cancer Institute of Canada — career awards, research scientist, training and study awards, Steve Fonyo studentships, junior and senior research fellowships, post-MD fellowships, clinical research fellowships  
National Foundation for Ileitis & Colitis (US) — personnel awards  
National Institutes of Health (US) — research grants (few)  
National Multiple Sclerosis Society (US) — fellowships, research grants  
Ontario Respiratory Care Society — fellowships  
U of T — self-funded research grants program  
Robert A. Welch Award in Chemistry — nominations  
**FEBRUARY 15**  
Association of Canadian Medical Colleges — research grants in medical education; workshops, conferences, seminars; visiting professors  
Cancer Research Society Inc. (Canada) — fellowships, research grants  
Juvenile Diabetes Foundation International/Juvenile Diabetes Foundation Canada — preliminary applications for research grants  
Miles (Bayer)/Canadian Red Cross Society — operating grants (letter of intent)  
**FEBRUARY 17**  
Ernest C. Manning Awards Foundation — nominations  
**FEBRUARY 20**  
Aka Khan Foundation Canada — fellowship in international development management  
**FEBRUARY 25**  
Ontario Mental Health Foundation — studentships for research grants  
**FEBRUARY 28**  
Foreign Affairs & International Trade Canada — Barton awards in international peace and security  
Royal Bank — award nominations

# COMMITTEES

The Bulletin regularly publishes the terms of reference and membership of committees. The deadline for submissions is Monday, two weeks prior to publication.

## SEARCH

### DEAN, FACULTY OF NURSING

A search committee has been established to recommend a dean of the Faculty of Nursing. Members are: Deputy Provost Carolyn Tuohy (chair), Professors Gail Donner, Ellen Hodnett and Patricia McKeever, Faculty of Nursing; John Hellebus, associate dean, Division

IV, School of Graduate Studies; Annie Abernethy, dean, Faculty of Medicine; Marion Bogo, acting dean, Faculty of Social Work; and Tony Miller, chair, Department of Preventive Medicine & Biostatistics; and Pamela Khan, senior tutor, Faculty of Nursing. See Tripathi, administrative staff, Faculty of Nursing; Margaret Risk, president, College of Nurses of Ontario; Heather Beaudand, graduate student, and Kelvin

Britten, undergraduate student, Faculty of Nursing; and Lou Charpentier (secretary).

The committee would welcome nominations and comments from interested persons. These should be submitted to Lou Charpentier, room 221, Simcoe Hall, by February 3.

### CHAIR, DEPARTMENT OF ZOOLOGY

A search committee has been established to

recommend a chair of the Department of Zoology. Members are: Professor M.A. Chandler, dean, Faculty of Arts & Science (chair); Professors Allan Boker, Department of Ornithology, ROM; Ian Brown, Rick Elmsion and Maurice Ringuette, Department of Zoology; Don Dewees, vice-dean, Faculty of Arts & Science; John Hellebus, associate dean, Division IV, School of Graduate Studies;

Angela Lange, zoology, Erindale College; and Ken Sevcik, Department of Computer Science; and Jonathan Smith, graduate student, Department of Zoology.

The committee would appreciate receiving nominations and comments from interested members of the University community. These should be submitted to Dean M.A. Chandler, room 2020, Sidney Smith Hall.

## THE EXPLOSION OF ETHNIC PASSIONS

*Ethnicity and nationalism are pressing issues in today's world. They are also the theme of this year's UC Symposium.*

BY ALLAN GREER

66 **B**EING CROAT HAS BECOME MY destiny," writes Slavenka Drakulic in *The Balkan Express*, "in this war I am defined by my nationality, and by it alone."

These are the words of a well-travelled intellectual of cosmopolitan outlook, raised on a diet of "brotherhood and unity" in multi-ethnic Yugoslavia. She never thought of herself first and foremost as a Croat, but now she finds herself "pinned to the wall of nationhood." Her identity as a journalist, as a woman, as a liberal thinker is no longer of any consequence: "I am not a person any more. I am one of 4.5 million Croats."

War-torn, hate-filled, raped and slaughtered former Yugoslavia is, of course, an extreme case, but millions of Chechens, Tamils, Armenians and Palestinians must share Drakulic's sense of being overwhelmed by nationality. As multinational empires and federations teeter and collapse, people look to their "own kind" for security: groups defined by highly visible badges — language, religion, race — take on an amazing importance when more abstract loyalties — to the federation, to communism, to humanity — have been destroyed or discredited. For every "we" so defined, there is always a "they" (the enemy, the outsider, the traitor). The sense that the collectivity is vulnerable and threatened seems to be an essential element in the formation of national and ethnic consciousness.

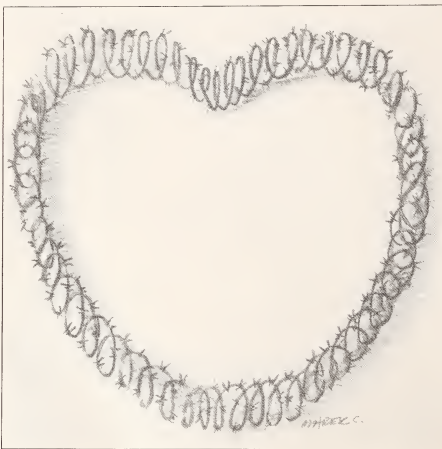
But it is only in very particular circumstances that blood loyalty has given rise to bloody strife. The world is filled with non-violent manifestations of national sentiment and ethnic particularity, from the revival of native customs and costumes among aboriginal groups to the competition for Olympic medals among national sports teams. Voters in one western European country after another spurn the advice of their political elites and reject further integration in the EEC as an infringement on their independence. Xenophobic political parties fight to end immigration and to send the "foreigners" packing.

Even here in Canada, far from the world's combat zones, we see a powerful movement at work to reinforce the French character of Quebec and to transform that province into a sovereign state. First Nations activists refuse to be overlooked in the national debate and press even more forcefully than in the past their claims to self-government. Meanwhile Canadians of various backgrounds dispute the virtues of multiculturalism, with some prizing the racial and linguistic diversity that immigration brings and others worrying that newcomers of different races and languages may be threatening "our" cultural traditions.

All this is profoundly troubling to "cosmopolitan intellectuals" such as Michael Ignatieff whose eloquent book *Blood and Belonging* explores the latest surge of nationalism in several countries. Ignatieff testifies to his own initial bewilderment at the sudden explosion of ethnic passions that, even very recently, seemed to belong to an earlier, less enlightened, stage of human evolution. The cold war is over, the global economy is upon us, education has never been so widespread: and here are people drawing lines, sometimes with deadly consequences, separating humanity into so many watertight compartments.

THE TEMPTATION IS GREAT EITHER TO TRIVIALIZE NATIONALISM — to assume, as Marxists, socialists and anarchists often did, that it would fade with the forward march of history — or to demonize it: note its links with war and genocide, call it a Bad Thing and end the discussion. But both these dismissive approaches, so appealing to the educationally privileged, so far removed from the mentality of millions of ordinary men and women, deflect us from the task of coming to terms with the phenomenon.

For all its atavistic features, and in spite of the tendency of



nationalists to identify with the glories and defeats of distant forebears, nationalism is not in fact ancient at all. As a political program, one which supports the right of every nationality to control its own territorial state, it extends back barely 200 years into the European past; its history through most of Asia and Africa is largely confined to the 20th century.

Some students of the subject suggest that nationalism is spawned by industrialization, others see it as the product of a breakdown of traditional communities and the emergence of depersonalized mass society, still other commentators discern connections with specifically political transformations attending the fall of traditional monarchies and empires. Scholars seem to agree, in general terms, that nationalism emerged as an integral part of a process that might be vaguely termed "modernization." According to political sociologist Liah Greenfield, it is indeed the quintessential ideology of modernity.



NATIONALISM CAN BE A FORCE  
FOR ENFRANCHISEMENT  
AND DIGNITY

The historical view makes it difficult to ignore the positive role played by national sentiment. In Europe and the Americas the idealization of the nation was closely connected to the growth of democracy as well as to the development of notions of citizenship and civic equality. It was primarily under the banner of nationality that colonized peoples around the globe fought for and secured their freedom from imperial rule. The fact that independence has in so many former colonies brought forth the bitter fruits of impoverishment and dictatorship should not blind us to the fact that nationalism did function as

a force for enfranchisement and human dignity. As good Americans, Italians, Indians or Kenyans, people made heroic efforts to overcome fear, selfishness and parochialism and struggle for the common good.

According to some analysts nationalist idealism, like nationalist hatred, has always flowed from wellsprings of delusion. The nation itself as an undivided whole with its millions of hearts beating as one is a fundamental reality for the true believer but to the sceptic it may seem nothing more than a chimera, an "imagined community." Nationalists also tend to have their own special understanding of history, invariably their nation has existed time out of mind, it has been bullied by neighbours and oppressed by foreign rulers for centuries and its people have been conscious patriots for just as long. Says Ernest Renan, "Forgetting history or distorting its record is an essential part of being a nation."

Ethnicity, on the other hand, is a concept more firmly anchored in the observable world. People really do speak different languages and follow distinctive customs. The Kurds form a genuine collectivity that can readily be distinguished from the Welsh or the Khmers or the Hopi. Unlike the identities associated with political nationality, these groupings are more or less primordial; they may have been shaped and modified by historical forces but as a rule the thread of cultural traditions reaches back through the centuries — in some cases, through the millennia — to link living members of an ethnic group with long-dead ancestors. Ethnic categories are nevertheless notoriously inexact, often they overlap, and they tend to shade off at the edges where intermarriage and assimilation blur the boundaries with other ethnic groups. Yet ethnicity, with all its mutability and indeterminacy, is a basic fact of social existence. For as long as there have been people on the face of the earth, there have been different peoples.

THERE IS ONLY SO MUCH ONE CAN SAY ABOUT ETHNICITY AND nationalism in general. In dealing with anything this particularistic, we must sooner or later come down to specifics and we will do that in the 17th annual University College Symposium. The symposium brings together 24 specialists from the University to explore various aspects of this theme. Several sessions will be devoted to a range of Canadian topics including First Nations aspirations, the Quebec sovereignty movement and literary expressions of Canadian nationalism. Other talks will focus on current manifestations of nationalism around the world, in eastern and central Europe, Africa, India and the British Isles. The program also includes a film and a concert of nationalist-inspired music by Chopin, Bartok and others.

In the process of working on the planning and organization of the symposium I have come to appreciate more than ever the value of this wonderful and unique institution. Where else do scholars from so many different fields and disciplines come together to share their knowledge and exchange views on a broadly defined topic? Moreover the talks and presentations are aimed at a non-specialized audience of professors, students, alumni and other members of the public. It was the college alumni organization that originally instituted the symposium and alumni remain a vital element in the event. At a time when academic discourse often seems far removed from public discourse, the symposium provides a bridge helping to span the gulf separating the "ivory tower" from the larger community.

Allan Greer is a professor of history at University College and this year's coordinator of the UC Symposium. The symposium runs from Tuesday, January 31 to Saturday, February 4, with sessions beginning every hour from 10 a.m. to 3 p.m. No registration or fees are required. Brochures are available at 173 University College or by calling 978-8083.